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Instruction Time and Student Learning

Can Cambodia Improve Learning Outcomes by Introducing Full-day Lesson Schedules in Primary Schools?

Main Report

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Contents

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Abbreviations

ASEAN	Association of Southeast Asian Nations
CR/C	Classroom-Per-Class
DLC	Digital Learning Center
DEO	District Education Office
EFA	Education For All
EMIS	Education Management Information System
ETC	*Escuelas de Tiempo Completo* (Spanish)
FTE	Full-Time Equivalent
FMIS	Financial Management Information System(s)
GEIP	General Education Improvement Project
GPI	Gender Parity Index
HIC	High-Income Country
HR	Human Resources
HRMIS	Human Resources Management Information System
ICT	Information and Communication Technology
INSET	In-service Training
KAPE	Kampuchea Action to Promote Education
LLSP	Local Life Skills Program
MCS	Ministry of Civil Service
MEF	Ministry of Economy and Finance
MIC	Middle-Income Country
MoEYS	Ministry of Education, Youth, and Sport
NER	Net Enrollment Rate
NGO	Nongovernmental Organization
NGS	New Generation School(s)
NLA	National Learning Assessment
OECD	Organisation for Economic Co-operation and Development
OOP	Out-of-Pocket
PISA	Programme for International Student Assessment (of the OECD)
PEO	Provincial Education Office
SEA-PLM	Southeast Asia Primary Learning Metrics
SSC	School Supporting Committee
SMC	School Management Committee
STEM	Science, Technology, Engineering, and Mathematics
TIMSS	Trends in International Mathematics and Science Study
UMIC	Upper-Middle-Income Country
UNESCO	United Nations Educational, Scientific, and Cultural Organization
USAID	United States Agency for International Development

Executive Summary

1. **Cambodia has made significant progress in improving access to education over the past decades; however, learning outcomes have improved only marginally in the past 10 years, raising concerns about the potential impediments of short school days in primary education.** Limited gains in student learning outcomes have raised concerns about the *quantity of teaching* in Cambodia's primary education schools. In 2024, the costs and effectiveness of increasing instruction time in primary education, to improve student learning outcomes, were debated within the Government of Cambodia and more broadly among education sector stakeholders.

2. **The main aim of this study is to provide context and substance to the ongoing policy discussion within the Royal Government of Cambodia, and more broadly among Cambodia's education sector stakeholders, on the need to increase instruction time in primary education schools, to improve student learning outcomes and strengthen the foundation of its general education program.** The analyses and findings presented in this report are based on both primary and secondary research. For this study, data was collected through a teacher and school survey (conducted in March and April, 2024) *in part* replicating an earlier survey conducted in late 2012. Moreover, an extensive range of education practitioners and sector experts was interviewed on a variety of topics covered in the scope of this study. Data was collected from existing government databases and academic literature as well as Cambodia's policies, regulations, instructions, and guidelines.

Main Findings

3. **A review of the literature on instruction time and student learning suggests there is no established academic consensus on the strength of this relation.** Meta studies find substantial heterogeneity in the effects: some studies on school day extensions find no effects, while others find that an additional hour of daily instruction improves test scores. Moreover, the total intended instruction time per year for primary education, and how much is allocated to core subjects (primary language and math), varies considerably across Organisation for Economic Co-operation and Development (OECD) member states, and there is no uniform set of best practices on instruction time in education.[1] Several studies suggest that while instruction time is relevant, its impact is significantly moderated by other factors, such as the quality of teaching or *how* the instruction time is used. However, there is some heterogeneity in terms of what studies identify as the primary moderating factors.

4. **A review of case studies on countries extending the duration of the school day suggests that increasing instructional time is typically associated with improvements in student learning, although some case studies found negative effects on learning or could not establish statistical significance.** The positive effects on student learning vary considerably across case studies and are typically modest in size. Some case studies suggest that the impact of the instruction time reforms was moderated by additional factors, though they do not uniformly point toward the same factors. Besides student learning, case studies have found a range of additional positive effects in countries where instruction time was increased, including educational, social, and economic. However, the costs of increasing instruction time are substantial. It is therefore considered one of the least cost-effective strategies to improve learning outcomes. In addition, reforms can be very lengthy, and the rollout of full-day schools across an education system in some cases took multiple decades.

[1] A widely cited range of 850 to 1,000 instruction hours per year in primary education for developing countries, often attributed to UNESCO, is often misrepresented as a prescriptive norm.

5. **Cambodia's current policy on instruction time for primary education, articulated in the 'Policy for Curriculum Development 2005–2009', is not specific on the total intended instruction time (that is, it ranges from 27 to 30 lessons per week and 684 to 760 hours** *per year**).*** It prescribes

   25 'national curriculum' lessons and another 2 to 5 'local life skills program lessons' per week (40 minutes per lesson and 38 weeks per year). Primary schools receive additional annual guidance and are instructed to provide 30 lessons per week (except once every 4 weeks, when only 25 lessons are provided), resulting in 1,093 lessons or 728 hours *per year.* This is at the lower end of the global average range, well below the OECD average and below the Association of Southeast Asian Nations (ASEAN) average. However, the share allocated to core subjects (Khmer and math) is unusually high, compared to OECD and ASEAN averages.

6. **Furthermore, public primary school teachers are expected to *teach* 25 hours per week, according to the Ministry of Education, Youth, and Sports (MoEYS) staffing norms** and spend the remaining 15 hours on 'preparation' and remedial teaching. Teacher in-class teaching hours of 25 per week, and thus 950 hours per year (that is, 25 × 38 weeks), is fairly high compared to international averages, but not outside the typical bandwidth. Moreover, staffing norms prescribe 1.15 teachers *per class,* combined allocating a total 1,093 *hours* of teaching *per class* (950 hours per teacher × 1.15 teachers per class). There is a considerable gap between intended instruction time (that is, the curriculum) and prescribed teaching hours per class (based on human resources [HR] regulations).

7. **Most teachers demonstrate a fairly strong comprehension of the curriculum and lesson schedule instructions provided by the MoEYS.** Teachers report spending more lessons on core subjects, especially math, than prescribed by the curriculum, and most teachers report that they have enough time to teach the prescribed curriculum. However, there is considerable variation in the self-reported working hours 'outside of class', which are significantly lower than the prescribed norms, suggesting teachers do not know what is expected of them and that many might work very few hours outside of class.

8. **Studies and reliable data on actual instruction time in Cambodia's primary education are *very* scarce, but the available data suggests considerable time loss due to school closures, teacher absenteeism, and tardiness.** A 2015 study estimated that actual instruction time was 27 percent shorter than intended instruction time and highlighted the impact of additional official school closures as well as significant teacher absenteeism right before and after official holidays. Moreover, Cambodian primary students reported the highest rates of teachers 'often' being absent, in a regional (Southeast Asian) study in 2019, and the second highest rates of teachers 'often' being late. In the 2024 survey conducted for this study, 6 percent of school staff were absent *during a preannounced* school visit, compared to 8.4 percent in 2012.

9. **Across Cambodia's peers in Southeast Asia, the average intended instruction time (that is, the mandatory curriculum time) is 21.7 hours per week and 826 hours per *year,* compared to 633 mandatory hours in Cambodia and 728 hours including Thursday remedial teaching.** Cambodia's curriculum allocates 43 percent to primary language acquisition (Khmer) and 26 percent to math, the highest relative shares across the region. Even in absolute terms, Cambodia's time allocation to core subjects, on average 11.5 hours per week, is one of the highest in the region. In Lao People's Democratic Republic, Myanmar, Thailand, and Viet Nam, a typical school day covers both the morning and afternoon, as students continue class after the lunch break (referred to as a 'full-day configuration'). Typical primary school day schedules across ASEAN countries vary considerably in terms of breaks included in the schedules and the share of the 'school day' devoted to instruction (that is, efficiency). The Malaysian, Thai, Philippine, and Vietnamese lesson schedules are used in this study as 'models' to illustrate instruction time reform options.

10. **There are overall three potential methods to increase instruction time in Cambodia's primary education curriculum.** First, by readjusting subjects within the curriculum or by reducing time loss through absenteeism, tardiness, and (un)official school closures. Second, by increasing the number of lesson days per week, month, or year. And third, by adding lessons or instruction time to the school day schedule (within-day method). Importantly, these methods are not mutually exclusive, and the MoEYS should consider applying all three, but they do vary considerably in terms of cost implications.

11. **In this study, four different *within-day* policy options are described:**

    I. Increase instruction time in a *split-day configuration*—'the Malaysian model'—maximizing lessons before the lunch break. This is the lowest-cost option and likely the most cost-efficient option to increase instruction time, but the amount of time that can be added is limited and restricted by local norms regarding the sanctity of the lunch break time and duration.
    II. Increase instruction time in a *full-day configuration*—'the Thai model'—adding one or more lessons after the lunch break. This is the highest-cost option and likely a medium to low cost-efficiency option to increase instruction time, depending on the schedule of lessons added in the afternoon.
    III. Increase instruction time in a *varied lesson/day/grade configuration*—'the Philippine model'—adding lessons after the lunch break for some grades only, some weekdays only, or for different grades on different weekdays. This is the medium-cost option (depending on the variations in implementation) and likely a medium cost-efficiency option to increase instruction time.
    IV. Increase instruction time in an *irregular afternoon configuration*—'the Vietnamese model'—through devolution and out-of-pocket (OOP) financed lessons, voluntary lessons, self-study hours, or extracurricular lessons. This final option considers that the policy options for increasing instruction time might also include variations in financing, delegated autonomy, and the use of the additional time.

12. **Some public primary schools in Cambodia have already increased instruction time for their students,** typically by introducing a *'full-day configuration'* (adding afternoon lessons after the lunch break *every day)* and paying stipends to existing teachers financed primarily by parents' contributions. These schools typically have strong reputations as 'good schools' and students from high-income households (previously enrolled in private education and/or tutoring). None of the schools' initiatives appear to have been restricted by government regulations, and none have robustly tested the impact of their initiatives. A key difference across these schools is the extent to which they have received support from the MoEYS, and the financial and implementation structure created for the additional teaching hours. Finally, there is considerable variation in the amount of instruction time gained and spending efficiency.

13. **This study estimates the costs of different policy options to increase instruction time, focusing on two *binding constraints* to implementation: (a) infrastructure (that is, classrooms and ancillary facilities) and (b) HR (that is, in-class teaching hours).** In the current split-day configuration (where two classes can use one classroom on the same day), an estimated US$10.2 million capital investment is required to address the existing classroom shortage of 429. In contrast, in a full-day configuration (where every class needs its own classroom), an estimated US$387.1 million is required to address a total classroom shortage of 16,240. HR cost estimates depend on *how* the MoEYS will mobilize and finance the additional HR to create more in-class teaching hours and on how existing HR planning and teacher in-class teaching norms will be applied or reformed. The additional recurrent costs of split-day configurations vary from US$27 million to US$68 million. The additional recurrent costs of full-day configurations vary from US$80 million to US$160 million. However, if HR reforms would result in more weekly teaching per teacher, this would significantly reduce the costs of these options. The cost estimates demonstrate that the investment and recurrent HR costs of increasing instruction time are highly dependent on the methods used and how significantly the spending efficiency varies across the existing full-day configuration initiatives that pay stipends to existing teachers.

Policy Recommendations

14. **Based on these findings, this study recommends that the MoEYS should consider a long-term and iterative approach to instruction time reforms to ensure the optimal outcome of its investments in student learning.** The MoEYS should pilot-test reform options and robustly measure their impact on student learning, before them rolling out to the more than 7,000 public primary schools in Cambodia. It should consider low-cost options to increase instruction time as reforms typically yield modest results and are considered the least cost-effective measures to improve student learning outcomes.

15. **Moreover, the MoEYS should invest in the *quality and effectiveness* of instruction time to ensure the efficacy of the instruction time reforms.** There is good evidence that interventions supporting teachers with structured lesson plans (with linked materials and ongoing teacher monitoring and training) and targeting teaching instruction by learning level, not by grade (in or out of school), can be highly cost-effective across various contexts. In addition, the MoEYS should clearly identify the objectives and the target groups or beneficiaries of instruction time reforms to inform the design of a policy intervention. In this context, the MoEYS should consider its commitment to promoting equity and creating equal education opportunities. It is important to consider that many methods of increasing instruction time and policy reforms options are not mutually exclusive, and the MoEYS should apply them in tandem rather than choose between them.

16. **In addition, the MoEYS needs to be aware that some of its current initiatives to establish full-day schools are costly methods for achieving a goal that could (if narrowly defined as increasing instructional hours per year) be achieved at much lower costs.** The MoEYS could increase instruction time to 950 hours per year by introducing a *very costly* full-day lesson schedule configuration similar to the new generation school (NGS) schedule discussed in this study, or it could introduce a *low-cost* split-day configuration similar to the 'Malaysian model' and increase annual lesson weeks to 40.

17. **Moreover, the MoEYS and the Ministry of Civil Service (MCS) should consider adjusting HR management regulations to increase the number of in-class teaching hours (that is, instruction time) per teacher, to limit the costs of instruction time reforms.** Different reforms could potentially be introduced. First, the MoEYS could introduce a new school lesson schedule (and teaching norm) that requires teachers to teach more hours per week (or per year) without additional pay and enforce compliance of *all* teachers to this new framework. Second, the MoEYS could compensate teachers for teaching more, but phase out the additional recurrent costs by limiting salary adjustment in the following years. Third, the MoEYS could introduce and enforce a new teaching norm *for new teachers only* and make acceptance of the new norm an explicit part of recruitment and appointments.

18. **However, the high prevalence of teacher secondary jobs is a key impediment to increasing the teaching per teacher norm that the MoEYS and MCS need to address (at least in the long term).** Notwithstanding the teaching per teacher norm, introducing full-day schools (that is, full-day lesson schedule configurations) *without teachers being available for the full day* will be exceedingly difficult. In addition, the very high prevalence of teacher secondary jobs likely already has a detrimental impact on student learning as it results in lower teacher effort. Moreover, it likely already results in actual instruction time loss and reduced effectiveness of education practices. Even without instruction time and HR management reforms, the MoEYS and MCS should clarify the curriculum, teaching norms, and HR regulations and more strictly enforce compliance.

19. **Finally, the MoEYS should strengthen its data management to develop a more robust knowledge foundation for decision-making and policy development.** The MoEYS should improve existing datasets on HR (ensuring all contract modalities and overtime payments are included in a single database) as well as education (Education Management Information System [EMIS]) and assets (school building, construction, and maintenance needs). It should also aim to synchronize datasets (payroll, Human Resources Management Information System [HRMIS], and EMIS) to enhance reliability.

1 Introduction

1. **Cambodia has made significant progress in improving access to education over the past decades.** The national net enrollment rate (NER) for primary education rose from 84 percent in 2001 to 95 percent in 2023.[2] The progress made in the post-primary levels during this period was even more impressive, with the NER for lower-secondary education increasing almost fourfold, from 17 percent to 65 percent, and for upper secondary education from 8 percent to 44 percent. Additionally, Cambodia has achieved gender parity in access to education at the primary level, with a gender parity index (GPI) in the NER of 1.0 in the 2022–2023 academic year. The GPI for lower-secondary and upper-secondary education in 2022–2023 was 1.15 and 1.25, respectively, indicating that female students have an advantage over male students in terms of access to secondary education.

2. **Despite progress in providing access to education, student learning outcomes have improved only marginally during the past decade.** National learning assessments (NLAs), conducted by the Ministry of Education, Youth, and Sport (MoEYS) during this period, show persistently low scores in literacy and numeracy tests; see Table 1. The NLAs of grade 6 students (that is, the final grade of primary education in Cambodia), conducted in 2013 and 2016, show only a marginal improvement in student learning outcomes. In 2013, students responding correctly was, on average, 46 percent for Khmer and 43 percent for math, whereas in 2016 this had increased to 52 percent for Khmer and 48 percent for math. In 2021, there was a decline in the percentage of correct answers for Khmer (47 percent) and math (38 percent), due to the COVID-19 pandemic's negative impact on student learning. Similarly, the results of grade 8 NLAs, conducted in 2014 and 2017, show only marginal progress in learning outcomes for math, as the percentage of correct answers for math increased from 44 percent to 47 percent, whereas results for Khmer decreased from 56 percent to 54 percent.[3]

Table 1: NLA scores for Khmer and math, grade 6 (2013–2016–2021) and grade 8 (2014–2017–2022)

			Grade 6			Grade 8		
Years assessed			**2013**	**2016**	**2021**	**2014**	**2017**	**2022**
Subjects	Khmer	Percent correct	46	52	46.9	56	54.2	54.4
		Scaled score	504	492.8	454.6	500	495.4	488
	Math	Percent correct	43	48.3	38.3	44	47.3	42.5
		Scaled score	489	493.2	421.9	500	493.5	473

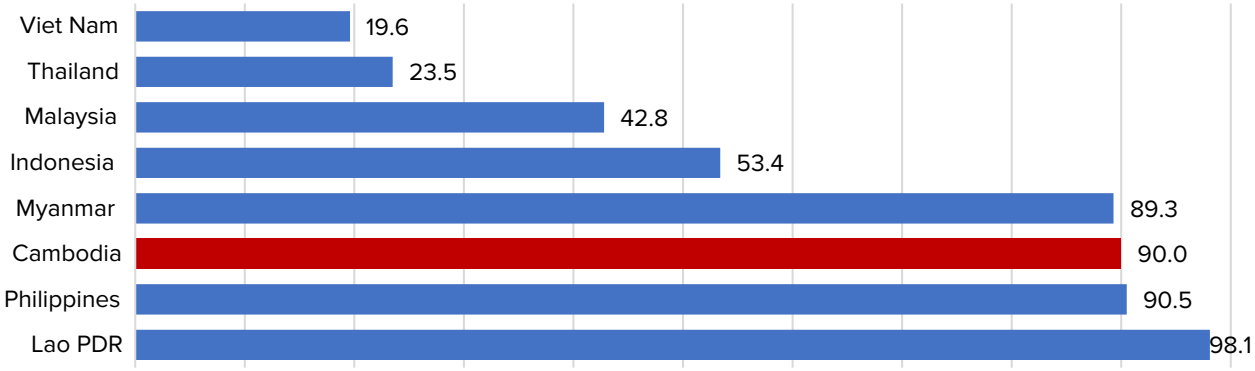
Source: MoEYS NLAs 2013–2022.

3. **Moreover, Cambodia's student learning outcomes are lagging some of its peers in the Southeast Asian region.** According to the World Bank's Human Capital Index 2021, 90 percent of 10-year-old Cambodian children could not read and understand a simple paragraph and could not answer basic questions from it. In terms of learning poverty, Cambodia ranked similar to Myanmar and the Philippines and performed better than Lao PDR. However, learning poverty rates are much lower in other Southeast Asian countries, including Viet Nam, Thailand, Malaysia, and Indonesia; see Figure 1.

[2] UNESCO Institute for Statistics (UIS) data retrieved October 2024.

[3] MoEYS Education Quality Assurance Directorate's National Learning Assessments 2013–2022.

Figure 1: Learning poverty updates by 2021 among ASEAN countries: Percentage of children that could not read and understand a simple paragraph



Data sources: (a) SEA-PLM 2019 for Lao PDR, Philippines, Cambodia, Myanmar, Malaysia, and Viet Nam; (b) Trends in International Mathematics and Science Study (TIMSS) 2015: Indonesia; (c) TIMSS 2011: Thailand.

Note: ASEAN = Association of Southeast Asian Nations.

4. **Limited gains in student learning outcomes have raised concerns about the quantity of teaching in Cambodia's primary education schools.** Primary students in Cambodia typically attend school for only 4 hours per day, out of which 3 hours and 20 minutes are committed to instruction. This relatively short duration of the school day is in part restricted by the need to run two educational shifts per day. Around two-thirds of primary schools in Cambodia are 'double-shift' schools, that is, teaching one group of students in the morning and another group of students in the afternoon but both groups using the same classroom and school facilities. However, this is not the primary impediment to longer school days, as schools running only one shift also typically provide only 3 hours and 20 minutes of instruction per day.

5. **In 2024, the costs and effectiveness of increasing instruction time in primary education, to improve student learning outcomes, were debated within the Government of Cambodia and more broadly among education sector stakeholders.** In 2024, some primary schools had already increased instruction time and expanded their schedules to provide lessons in both the morning and afternoon. The policy dialogue focused on the feasibility and desirability of scaling up these initiatives, considering the potential gains in student learning outcomes as well as the extra costs incurred by the government for financing the construction of additional classrooms and teaching hours needed to implement the reforms.

6. **The main aim of this study is to provide context and substance to the ongoing policy discussion within the Royal Government of Cambodia, and more broadly among Cambodia's education sector stakeholders, on the need to increase instruction time in primary education schools, to improve student learning outcomes and strengthen the foundation of its general education program.** It provides an accurate and detailed description of instruction time in Cambodia's primary education, both current policy and practice; presents lessons learned from countries that increased instruction time and switched to full-day curricula; and identifies policy options, for the Royal Government of Cambodia, to increase instruction time in primary education as well as estimate their associated costs.[4] More broadly, this study aims to support the Royal Government of Cambodia's reform agenda and its vision for 2050, as articulated in the government's Pentagonal Strategy, which identifies the investments in human capital development, and the enhancement of quality education specifically, as critical in responding to the growing needs of Cambodia's national socioeconomic development.[5]

[4] This study was conducted as part of the World Bank's education programmatic advisory services and analytics (PASA) and initiated upon the request of the MoEYS and the Ministry of Economy and Finance (MEF).

[5] Royal Government of Cambodia. 2023. "Pentagonal Strategy – Phase 1." p. 41.

7. **This report includes six sections: Section 2** presents a brief literature review on the relation between instruction time and student learning as well as case studies that tried to assess how student learning was affected by reform interventions in other countries that increased instruction time and switched to full-day curricula. **Section 3** describes the intended instruction time in Cambodia's primary education curriculum as well as teacher staffing and teaching norms. Thereafter, it analyzes teacher self-reported data, from the 2024 survey, on instruction time, and it reviews the data and studies on actual instruction time. **Section 4** compares Cambodia's primary education instruction time to its regional peers in Southeast Asia, including their allotments to core subjects (that is, primary language and math). It also describes school day schedules applied across the region to illustrate potential options for Cambodia. **Section 5** then describes different methods and policy options for increasing instruction time as well as some of the existing initiatives in Cambodia to extend the school day. Moreover, it briefly presents cost estimates for the implementation of these policy options. Finally, **Section 6** summarizes a discussion on the main findings in this study and identifies recommendations for reform.

8. **This study on teaching quantity in Cambodia's primary education was conducted in parallel with a study on teaching quality in Cambodia's primary education.** These studies are complementary in their findings, and both aim to unpack the root causes of learning poverty in Cambodia. See *Teaching Quality in Cambodia's Primary Education - Toward Incentivizing Effort, Performance, and Quality Assurance* (2025), for a more detailed discussion on teaching quality, including the reforms that aim to increase the attractiveness of the teacher profession, teacher performance, and teacher preparation. This document also provides recommendations on investments and policy reforms to further improve teaching quality in Cambodia's primary education.

Methodology

9. **The analyses and findings presented in this report are based on both primary research, data collected specifically for this study, and secondary research, data collected from existing databases, academic literature, and public policies and regulations.** For this study, data was collected through a teacher and school survey conducted in March and April 2024. The 2024 survey replicated *in part* an earlier teacher and school survey conducted from November 2012 till January 2013, to allow for a quasi-longitudinal analysis of primary school teacher characteristics and factors moderating teaching quality. Both surveys collected data from a nationally representative sample based on the random selection of primary schools in Cambodia (149 schools in 2012 and 150 schools in 2024)[6] and included structured interviews with teachers, school principals, and school community representatives, although the structure and topics discussed varied somewhat between the surveys. Both surveys included classroom teacher and student attendance checks, classroom observations exercises, and the testing of teachers on their math and pedagogic competencies. See Appendix 7.2 for a more detailed description of the study's overall methodology and the methodology of the surveys specifically.

10. **An extensive range of education practitioners and sector experts were interviewed for this study on a variety of topics covered in the scope of this study.** Administrators, along Cambodia's education service delivery chain, were interviewed, including parents and local community leaders, teachers and school principals, district and provincial officials, and managers of provincial teacher training facilities as well as central MoEYS departments for policy, planning, finance, human resources (HR), teacher training, curriculum, primary education, school construction, exam affairs,

[6] The 2012 (*and 2024*) survey included 149 (150) schools, 676 (727) teacher interviews, 149 (150) principal interviews, 543 (574) community representative interviews, 688 (725) teacher tests, 284 (300) classroom observations, 2,185 (1,933) classroom checks, and 2,258 (2,421) staff attendance checks. For a more detailed description of the sampling method, please consult Appendix 7.2.

and the MoEYS units maintaining databases and management information systems. Moreover, interviews were conducted with civil service regulatory authorities (that is, the Ministry of Civil Service [MCS]) and the education sector's international development partners, as well as regional (Southeast Asian) and global education experts.

11. **Finally, data was collected from existing government databases and academic literature as well as Cambodia's policies, regulations, instructions and guidelines.** School-level data on students, classes, and classrooms was collected from the Education Management Information System (EMIS) maintained by the MoEYS. Teacher (and school-level staff) data, including data on contract teachers and additional double shifts, teacher attrition, and teacher salary rates, was collected from the MoEYS' Personnel Department as well as its Human Resources Management Information System (HRMIS) department. Aggregate data was retrieved from the MoEYS annual education congress reports. Additional data on teacher applicants and trainees was collected from the teacher training general directorate and on the final grade 12 national examinees from the exam affairs department. Moreover, international databases were consulted, and a review of cases studies on countries increasing instruction time was conducted. Finally, this study reviewed policies, regulation, guidelines, and instructions for the MoEYS and Royal Government of Cambodia more generally. For a more detailed description of the primary and secondary research conducted for this study, please consult Appendix 7.2.

Demarcation and Definitions

12. **First, this study focuses on instruction time in *public primary school teaching* in Cambodia** and most of the analyses presented in this study are limited to public primary education *teachers and instruction time*. Other programmatic levels of general education delivered by the MoEYS (such as preschool, lower secondary, and upper secondary education) and private education schools and teachers are *not* part of the scope of this study and mentioned only to provide context for the analyses.

13. **Second, this study discusses curricula and school lesson schedules in the context of the MoEYS' aim to *increase the time spent in class* by primary students.** There are no uniform naming conventions applied in the academic literature on these topics. In this study, the *curriculum* refers to the prescribed number of lessons and lesson time (that is, duration) and the *lesson schedule* prescribes the *time of day* that the lesson should be provided. Moreover, this study refers to the time (that is, duration) of lessons prescribed by the curriculum as the *intended instruction time*. Increasing instruction time refers to a process where more time (that is, duration) is added to the curriculum. Lesson schedules prescribing lessons in both the morning and afternoon (that is, time of day) for a single group of students are referred to as *full-day configurations,* whereas lesson schedules providing lessons in only one part of the day (morning *or* afternoon) for a single group of students are referred to as *split-day configurations*.

14. **Third, this study often refers to the number of shifts provided by schools as 'single-shift' or 'double-shift' schools.** Single-shift schools provide only one education shift per day *to a single class or group of students,* whereas double-shift schools provide two education shifts per day to *two different classes or groups of students.* In the current lesson schedule (split-day configuration), single-shift schools typically provide lessons in the morning (7 a.m. to 11 a.m.), whereas double-shift schools provide the first shift in the morning (7 a.m. to 11 a.m.) and the second shift in the afternoon (1 p.m. to 5 p.m.). Double-shift schools should not be confused with 'full-day schools' that provide lessons in both the morning and afternoon to *a single class or group of students.*

15. **Fourth, data on teachers presented in this study is often disaggregated by 'gender' (that is, female/male), 'contract modality', and 'location'.** The contract modality category differentiates between '(regular) civil servant teachers': teachers with a semipermanent appointment in the civil service (and governed by civil service regulations); contract teachers: appointed to a position for 10 months only (and governed by unique set of regulations); and 'double-shift teachers': civil servant teachers with a semipermanent appointment in the civil service who are also appointed to teach an *additional* education shift for a 10-month period. The location category differentiates between 'urban', 'rural', and 'disadvantaged'. This classification combines the 'urban' versus 'rural' classification of districts and government facilities, more commonly applied across the Royal Government of Cambodia (where Phnom Penh and all provincial capitals are classified as urban), with a specific 'disadvantaged' classification applied to six remote provinces as well as some districts and specific education and health facilities. See Appendix 7.3 for a description of this classification. The MoEYS classification is typically used in the context of equity promoting policies and aimed at identifying areas that are relatively lagging in economic and human capital development. A reference in this report to 'rural' or 'disadvantaged' teachers should be understood as a classification of the school location where these teachers work.

16. **Finally, all Cambodian riel (KHR) amounts are converted to United States dollar (US$) amount using a fixed conversion rate (US$1 = KHR 4,000).** These conversions are added for ease of reading only and do not accurately reflect average annualized conversion rates.

2 Increasing Instruction Time - Literature Review

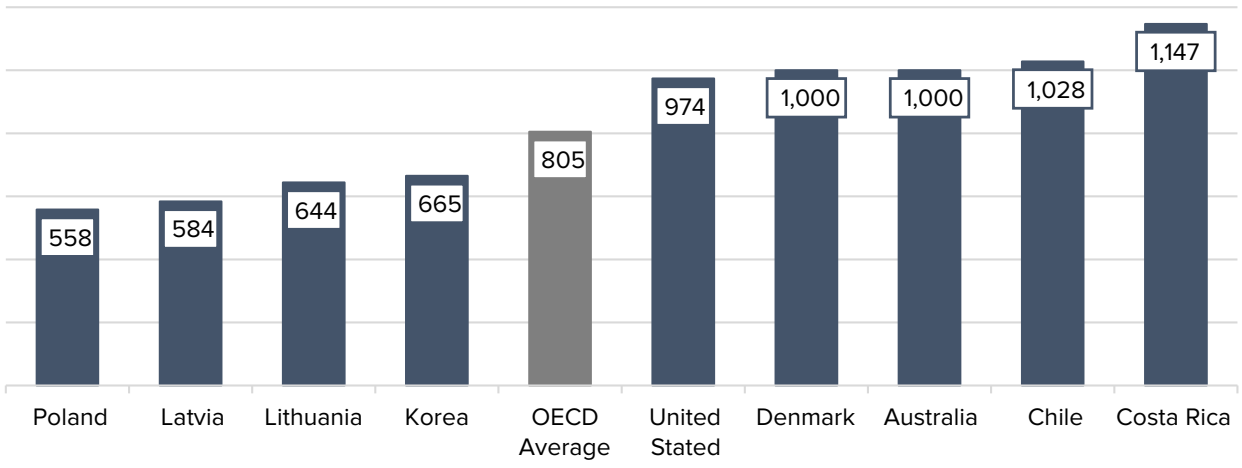
This section briefly presents a review of literature on the relation between instruction time and student learning as well as case studies on the impact of reform interventions in countries that increased instruction time.

2.1 Instruction Time and Student Learning

17. **Although many studies have found a positive relation between instruction time and student learning, this continues to be the subject of an ongoing debate among education researchers, and there is no established academic consensus on the strength of the relation.** Meta studies, consolidating findings of a large number of studies, find substantial heterogeneity in the effects of increasing instruction time. Some studies on school day extensions find no effects, while others find that an additional hour of daily instruction improves test scores. Similarly, while some studies show that lesson days lost due to bad weather do not affect students' performance, others show that an additional 10 days of class before an exam improve test scores significantly.[7] A 2014 meta-analysis of 30 studies on increased learning time programs found mixed effects on student academic and nonacademic outcomes, and concluded that the impacts of these programs are dependent on moderating factors such as the qualifications of teachers, how the instruction time is used, and what type of students are targeted (for example, poor performing students).[8]

18. **Organisation for Economic Co-operation and Development (OECD) member states, including high-income countries (HICs), vary considerably in terms of intended instruction time per year for primary education, suggesting a lack of consensus on the optimal hours for student learning.** The average (compulsory) instruction time per year in primary education varies from 558 hours in Poland to more than double that, at 1,147 hours, in Costa Rica. The OECD average is 805 and most countries fall within a 660–1,000 hours bandwidth. HICs can be found at both ends of this spectrum with Chile (1,028 hours), Australia (1,000 hours), Denmark (1,000 hours), and the United States (974 hours) at the higher end and Poland (558 hours), Latvia (584), Lithuania (644 hours), and the Republic of Korea (665 hours) at the lower end (see Figure 2), suggesting that in a less fiscally restrained context, some governments still choose to provide a limited number of instruction hours per year.

Figure 2: Intended instruction time per year for primary education, OECD members and partners (average, and lower and higher end)



Source: Education at a Glance, OECD 2023.

[7] Barrios-Fernandez, A. 2022. "Instruction Time and Educational Outcomes." Unpublished, p. 1.

[8] Kidron, Y., and J. Lindsay. 2014. "The Effects of Increased Learning Time on Student Academic and Nonacademic Outcomes: Findings from a Meta-Analytic Review." U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Appalachia, p. 16.

19. **OECD member states also vary considerably in how instruction time is allocated to core subjects (primary language and math).**[9] In Portugal, for example, the share of the curriculum allocated to primary language (19 percent) is equal to the share allocated to math (19 percent), whereas in France the share allocated to primary language (38 percent) is almost double the share allocated to math (21 percent). Moreover, OECD members (and partner countries) vary in the share allocated to math (math is more comparable across countries in terms of the effort required to acquire the skill than primary languages, which can have idiosyncratic difficulties).[10] Denmark and Korea spend 13 percent and 14 percent, respectively, on math, whereas France spends 21 percent and Croatia 22 percent.

20. **A prescriptive 'gold standard' or uniform set of best practices on instruction time in education cannot be derived from international comparison as the relation to student performance is weak and there are many outliers.** Countries with high-performing students (as defined by Programme for International Student Assessment (of the OECD) [PISA] scores) vary considerably in terms of instruction time and thus do not provide insights into optimal learning hours. Moreover, many high-performing countries have a relatively low number of annual instruction hours (for example, Korea, Poland, and Finland), and many poor-performing countries have a relatively high number of annual instruction hours (for example, Costa Rica and Colombia).

21. **A widely cited range of 850 to 1,000 instruction hours per year in primary education for developing countries, typically attributed to United Nations Educational, Scientific, and Cultural Organization (UNESCO), is often misrepresented as a *prescriptive* norm.** Many academic studies refer to this range as 'recommended' by UNESCO, often citing the organization's 2005 Education for All Global Monitoring Report. The report itself refers to the range as "a broadly agreed benchmark for minimum instruction hours per year"[11] and "a World Bank estimate for the optimal hours of instruction time in publicly financed primary schools".[12] However, the '850 to 1,000 hours per year' range originates from a World Bank report suggesting *target indicators for multilateral financing* and was not meant to identify the optimal instruction time for student learning.[13]

22. **Several studies suggest that while instruction time is relevant, its impact is significantly moderated by other factors, such as the quality of teaching or *how* the instruction time is used.** For example, an OECD literature review on the relation between instruction time and student learning confirmed the value of *sufficient instruction time as a key educational resource,* but it concluded that what matters the most is *the way in which allocated time is used* and that student learning time and academic achievement seem to have *a complex and curvilinear relationship with diminishing returns to scale*.[14] Moreover, a 2021 cross-country comparison concluded that the effect of instruction time is larger for students with better qualified teachers. The study also found that instruction time has, on average, *no significant effect on student learning in developing countries,* but students in developing countries who are taught by highly qualified teachers do demonstrate an improvement in learning.[15]

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9 OECD. 2023. *Education at a Glance 2023*. Paris: OECD, p. 373.

10 Ibid.

11 UNESCO. 2004. *Education For All Global Monitoring Report 2005*. Paris: UNESCO, p. 22.

12 Ibid, p. 150.

13 World Bank. 2004. *Education For All Fast Track Initiative Progress Report. Washington,* DC: World Bank, p. 10 (box 1).

14 Anna, G., and S. Claire. 2016. "Student Learning Time: A Literature Review." OECD Education Working Paper 127, OECD, Paris, p. 3.

15 Wedel, K. 2021. "Instruction Time and Student Achievement: The Moderating Role of Teacher Qualifications." *Economics of Education Review* 85: 2.

23. **However, there is some heterogeneity in terms of what studies identify as the primary moderating factors, as other studies point toward student characteristics and the reform implementation process.** For example, a 2022 meta study on the relationship between instruction time concludes that *"the benefits of reforms [...] vary substantially across settings, as they depend on the characteristics of the students, the school systems, and on how the changes are implemented. While some studies find no significant or modestly positive effects, others find that additional instruction time significantly improves students' performance. These differences suggest that the design and implementation of reforms that extend instruction time is not trivial."*[16]

2.2 Case Studies on the Impact of Increasing Instruction Time

24. **This subsection summarizes the main findings from studies assessing the impact of reform interventions in other countries that introduced full-day curricula (or partially increased instruction time).** For this report, 13 case studies were reviewed that assessed the impact of increased instruction time in middle-income countries (MICs), as income classification seemed relevant a priori to find case studies that are relatable to the challenges in Cambodia's education sector. Almost all the case studies assessed reforms in Latin-American countries (Brazil, Chile, Colombia, Ecuador, and Uruguay), where governments throughout the 1990s decided to move school days from approximately 4 hours to around 6–7 hours. Most countries were classified as upper-middle-income countries (UMICs) at the time the reforms were initiated. Some countries have since graduated to the HIC classification (for example, Chile and Urugay)

25. **A key challenge to assessing the impact of instruction time reforms is that they are usually embedded in a larger program of reforms in the education sector, making it difficult to disentangle and isolate its effects.** Lengthening of the school day and other interventions that increase instruction time are often introduced alongside other education reforms such as teacher training and curriculum reforms. For example, in the case of Urugay, the full-day school reforms in the late 1990s included the construction of additional classrooms, the provision of nutrients and health services, teacher training, and the provision of new teaching materials. The clustering of reforms, although potentially beneficial for the reforms' objectives, dilutes causation and impedes the ability of researchers to establish the impact of increasing instruction time by itself.

26. **Increasing instruction time is typically associated with improvements in student learning (that is, literacy and numeracy exam scores), although some case studies found negative effects on learning or could not establish statistical significance.** Out of the 13 case studies reviewed, most found a positive effect on student test scores; see Table 2. Six case studies found positive and significant effects for both literacy and numeracy tests, including several case studies on the curriculum reforms in Chile but also studies on Colombia, Ethiopia, and Urugay. However, several case studies found negative (and statistically significant) effects. Two case studies on the impact of reforms in Brazil revealed a negative effect on numeracy scores, and one case study on Urugay indicated a negative impact on both literacy and numeracy.

[16] Barrios-*Fernandez,* A. 2022. "Instruction Time and Educational Outcomes." Unpublished, p. 7.

Table 2: Overview of reviewed country studies on the impact of increasing instruction and switching to full-day configurations

Authors	Country	Outcomes, effects, significance	Literacy	Numeracy
Bellei (2009)	Chile	Positive impact on math and language	Positive Significant	Positive Significant
Valenzuela (2005)	Chile	Robust and significant positive effects in the short run on schooling outcomes; public schools increase their scores by only 0.1–0.2 standard deviations in language test, voucher schools by 0.4 standard deviation	Positive Significant	Positive Significant
Garcia (2006)	Chile	Significant impact on language results at urban public schools (0.07) and with copayment (0.14) at urban voucher	Positive Significant	Positive Significant
Dias Mendes (2011)	Brazil	Significant negative effect on math results by −0.03 (grade 4) and −0.06 (grade 8)	Positive Insignificant	Negative Significant
Arzola (2010)	Chile	Students who participated in jornada escolar completa during the four years between 2005 and 2009,increased their scores about one point on each test, although this value is not statistically significant	Positive Insignificant	Positive Insignificant
Hincapié (2013)	Colombia	Test scores increase by about 0.357 for grade 9 language test scores, and by 0.289 for math test scores.	Positive Significant	Positive Significant
Llambí (2013)	Uruguay	Significant negative effect on test scores (science −0.29, math −0.27, and language −0.24)	Negative Significant	Negative Significant
Xerxenevsky (2012)	Brazil	Effects of 0.05 for language and 0.06 for math scores for grade 4	Positive Significant	Negative Significant
Xerxenevsky (2012)	Brazil	No significant effect on grade 8 students	Negative Insignificant	Negative Insignificant
Cerdan-Infantes and Vermeersch (2007)	Uruguay	Improvements in test scores of 0.04 standard deviation (language) and 0.06 standard deviation (math) per year	Positive Significant	Positive Significant
De Aquino (2011)	Brazil	No impact on proficiency, grade advancement, or math. Small effect on language (significant)	Positive Significant	
Pires and Urzua (2015)	Chile	Positive impact on academic outcomes (dropouts), cognitive test scores		
Orkin (2013)	Ethiopia	Significant improvement in writing and math scores, but no significant effect on reading. Effects are larger among better-off children and larger positive effects on girls than boys	Positive Significant	Positive Significant

27. **The positive effects of increasing instruction time on student learning vary considerably across case studies and are typically modest in size.** Across the reviewed studies, the statistically significant effect size typically ranged between 0.05 and 0.30 standard deviations.[17] There is an ongoing debate on what learning increase should be considered 'policy relevant'; however,

[17] Crawfurd, L., S. Hares, and J. Sandefur. 2022. "What Has Worked at Scale?" Chapter 1. In *Schooling for All: Feasible Strategies to Achieve Universal Education,* edited by J. Sandefur, 11. Washington, DC: Center for Global Development.

among education researchers, this benchmark is typically set lower (at 0.2 standard deviations) than research in other social sciences. For comparison, the early grade reading intervention pilot, conducted by the United States Agency for International Development (USAID) in Cambodia, found significant results for recognizing words, between 0.17 and 0.35 standard deviations, and letter knowledge between 0.33 and 0.56 standard deviations.[18]

28. **Some case studies suggest that the impact of the instruction time reforms was moderated by additional factors, but there is considerable variation in the factors identified by the studies as critical to achieving a positive impact.** The studies broadly point toward two factors on which student outcomes are dependent: what happens in school during the extra time (that is, how the additional instruction time is used) and what the beneficiaries would be doing if they were not in school during the extra time. However, case studies also highlight the importance of the quality of instruction, and they significantly differ in their findings regarding who benefits most (for example, rural students, poor students, high- or low performing students).

29. **Besides student learning, case studies have found a range of additional positive effects in countries where instruction time was increased, including educational, social, and economic effects.** In some case studies, extending school time was found to have positive effects on education beyond exam scores, such as reduced dropout or increased promotion rates of students.[19] In some countries, the studies showed positive long-term effects on secondary school attendance and completion, increased cognitive skills, and a reduction in teenage pregnancies.[20] A few studies attempted to assess the impact on students' labor market perspectives. However, they found positive but statistically insignificant effects on employment and income.[21] Finally, some case studies found positive effects for the students' parents, since longer school days provide a form of subsidized childcare and may therefore increase parental employment and family income. In Chile, the full-day school program resulted in increased labor force participation, employment, weekly hours worked, and months worked per year for mothers.[22]

30. **However, the costs of increasing instruction time are substantial, and it is therefore considered one of the least cost-effective strategies to improve learning outcomes.** Additional recurrent spending, associated with the introduction of full-day schooling, ranges from 25 percent to 60 percent. In Urugay, the introduction of full-time schools in primary education (see Box 1) resulted in a 60 percent increase in primary education recurrent spending, while its impact on student learning outcomes was marginal (a 0.044 standard deviation improvement on Spanish test scores and 0.063 improvement on math test scores). A basic cost-effectiveness estimate conducted by Holland, Alfaro, and Evans (2015), and limited only to the Urugay case study, suggests that introducing full-day schooling is one of the least cost-effective strategies to improve student learning and there are many alternative interventions that can achieve similar results at lower costs.[23]

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[18] USAID. 2020. *All Children Reading–Cambodia - Student Performance in Early Literacy: Midterm Impact Report*, pp. 13–16.

[19] See for example: Pires, T., and S. Urzua. 2015. "Longer School Days, Better Outcomes?" Unpublished Working Paper; Dias Mendes, K. 2021. "O Impacto do Programa Mais Educação no Desempenho dos Alunos da Rede Pública Brasileira." University of São Paulo; and Llach, J., C. Adrogué, and M. Gigaglia. 2009. "Do Longer School Days Have Enduring Educational, Occupational, or Income Effects? A Natural Experiment in Buenos Aires, Argentina." *Economía,* 10 (1): 1–43.

[20] Llach, J., C. Adrogué, and M. Gigaglia. 2009. "Do Longer School Days Have Enduring Educational, Occupational, or Income Effects? A Natural Experiment in Buenos Aires, Argentina." *Economía,* 10 (1): 1–43. Pires, T., and S. Urzua. 2015. "Longer School Days, Better Outcomes?" Unpublished Working Paper.

[21] Ibid.

[22] Contreras, D., P. Sepúlveda, and S. Cabrera. 2010. "The Effects of Lengthening the School Day on Female Labor Supply: Evidence from a Quasi-Experiment in Chile." Serie Documentos de Trabajo 323.

[23] Alfaro, P., and P. Holland. 2012. *Case Studies in Extending the School Day in Latin America*. Washington, DC: World Bank, p. 22.

31. **In addition, the case studies suggest that reforms increasing instruction time can be very lengthy, and the rollout of full-day schools across an education system can take multiple decades.** For example, it took Chile 10 years to increase the coverage of its full-day school program from 55 percent to 80 percent. Similar lengthy rollout processes were found in regional programs in Argentina.[24] Full-day schooling reforms in Urugay have been ongoing for more than two decades. In Singapore, the implementation of 'extended learning time' took several decades and several experimental trials to arrive at the final format.

Box 1: Introducing full-time schools in Urugay

Urugay introduced the 'full-time schools' or '*Escuelas de Tiempo Completo*' (ETC) program in the late 1990s, with support from a World Bank project. The ETC model was introduced in 1998, primarily targeting urban areas classified as socioeconomically 'disadvantaged' or 'very disadvantaged'. The introduction of the ETC program at primary schools included several reforms:

- Lengthening of class time from 3.5 to 7 hours per day for 5 days per week, an additional 3 hours per week of complementary attention to students with special needs and/or community service activities, and 2 hours of teacher meetings.
- Construction of new classrooms and a reduction of the recommended number of pupils per classroom (to 25 in grades 1–3, and 28 in grades 4–6).
- Teacher training; the provision of a set of teaching materials, such as maps, books, or dictionaries; and the establishment of teacher committees.
- Introduction of collective, complementary, and classroom activities.
- Provision of nutritional and health care support for students.
- Increased participation of parents and enhanced accountability/community involvement.

Evaluation of ETC: Primary education spending rose by 60 percent. The impact for extending the school day in Uruguay for a grade 6 child who spends one year of primary school in an ETC would be 0.044 standard deviations for Spanish and 0.063 standard deviations for math.

Source: Cerdan-Infantes, P., and C. Vermeersch. 2007. "More Time Is Better: An Evaluation of the Full-Time School Program in Uruguay." World Bank Policy Research Working Paper 4167, World Bank, Washington, DC.

2.3 Discussion

32. The brief literature review in this section presents several findings with implications for the primary education instruction time reforms considered by the MoEYS.

33. **First, the heterogeneity of findings across the academic literature and cases studies suggests that the benefits of reform interventions are *not guaranteed* and that an experimental approach is optimal in the case of Cambodia.** While many countries have improved student learning outcomes through full-day schooling interventions, these gains are not guaranteed for Cambodia, and some evidence implies there might be none (for example, literature concluding that developing countries did not achieve student learning gains on average, without highly qualified teachers). An experimental approach, piloting multiple options for increasing instruction time (as well as potentially other interventions such as teacher training) combined with rigorous impact evaluations, is required to identify cost-effective options to improve student learning outcomes.

34. **Second, as benefits of increasing instruction time vary and are often modest, a return on investments cannot be estimated a priori, and low-cost options are preferrable over high-cost**

[24] Alfaro, P., and P. Holland. 2012. *Case Studies in Extending the School Day in Latin America*. Washington, DC: World Bank, pp. 7 and 16.

options. Some of the existing pilots on increasing instruction time in Cambodia (see subsection 5.3) are high-cost options that, if rolled out across Cambodia's primary schools, would have a substantial impact on the recurrent costs of primary education. The Uruguayan case study implies an important warning, with particular relevance to Cambodia's decision-makers, that a substantial (and irreversible) increase in recurrent education spending does not necessarily yield significant improvements in student learning outcomes. Low-cost options mitigate this risk and allow for additional future investments, once reforms have proven to work and yield results.

35. **Third, instruction time reforms should not halt or replace investments and reforms in the quality of instruction.** Although the literature does not uniformly identify the critical factors moderating the relation between instruction time and student learning outcomes, it does imply that the quality of instruction is relevant. Poor teaching quality, or ineffective use of the instruction time, might actually be a binding constraint to improving student learning outcomes and would most likely require continued investments for full-day schooling to have any impact on student learning.

36. **Fourth, instruction time reforms should be clear-eyed in terms of objectives and potential for improving student learning outcomes.** The literature suggests that what students would otherwise do with their time is relevant to the impact of instruction time reforms. In Cambodia, where private tutoring is prevalent among urban and high-income areas, full-day schooling could potentially be less effective (or even have negative effects on already high-performing students). Conversely, students who do not enjoy private tutoring or students who struggle to keep up with the curriculum might benefit more from the provision of additional instruction time. However, the evidence on who benefits most from these reforms is not conclusive, and potential variations should be included in a piloting phase.

37. **Fifth, the literature suggests that there are potentially many positive outcomes, beyond student exam scores, that could justify the investments required to introduce a full-day curriculum.** In fact, in some countries, such as Singapore, allowing parents to work more while their children stay in school longer seems to have been an important motivation (if not the primary motivation) for the introduction of full-day school schedules.[25]

38. **Finally, the literature suggests that Cambodia's instruction time reforms might take well over a decade to fully roll out across its education program and should allow for multiple systems to exist within the same primary education program.** As instruction time reforms are typically implemented over a long-term horizon, education regulations, the curriculum policy, and staffing norms need to be flexible enough to allow for (at least) two parallel systems (that is, for schools that have implemented the reforms and for schools that are yet to implement them). The framework will have to allow for schools to operate on different tracks. Some of Cambodia's regional peers (for example, Viet Nam; see Section 4) still have remnants of such hybrid systems, where schools typically provide lessons the whole day, but the *minimum mandatory curriculum* can be completed in one part of the day (that is, morning or afternoon).

39. **The long-term implementation horizon also suggests that a 'trial and error approach' including pilot testing as well as periodic evaluations and adjustments should be considered.** Policy reforms addressing the current impediments to Cambodia's education sector outcomes will evolve over time, and school day extensions in primary education might be designed for different reasons today than the issues they will need to address a decade from now. It also suggests that reforms require long-term sustained political will from policy makers and decision-makers and an acceptance that intermediate reforms might have to be prioritized over reforms aimed at immediately establishing the desired end state. For example, Cambodia might not be able to finance a full-day curriculum at this stage of its development, but it could still take the first intermediate steps toward that goal.

[25] World Bank. 2019. "Selected Cases Studies in the Expansion of Student Learning Time: A Background Paper to Inform the Preparation of the Project Transforming Croatia: Better Schools, Better Learning, Better Life." Unpublished, p. 46.

3 Primary Education Instruction Time - in Cambodia

40. **This section discusses instruction time in Cambodia's primary education schools.** It first describes the officially allocated instruction time, expressed in the MoEYS' policy and guidance on the (primary education) curriculum and lesson schedule, referred to as *intended instruction time*. It also briefly describes the government's regulations and norms on teacher working hours and (class) staffing norms. Thereafter, this section analyzes teacher and school management self-reported data, from the 2024 survey, on the curriculum, working hours, and absenteeism. Finally, it summarizes the few data sources available on *actual instruction time:* intended instruction time minus the time lost due to school closures, teacher absenteeism, and tardiness.

3.1 Intended Instruction Time

41. **The MoEYS current policy on instruction time for primary education in Cambodia is articulated in the 'Policy for Curriculum Development 2005–2009'.** The policy identifies intended instruction time for primary education (grades 1 to 6), lower-secondary education (grades 7 to 9), and upper-secondary education (grades 10 to 12). The 2005–2009 curriculum was meant to be revised in 2009, but instead revised curricula were published in 2016 and 2018 (by the MoEYS curriculum department). These revised curricula have not been implemented, as the MoEYS was unable to mobilize the resources required to develop new textbooks and finance the additional instruction time. As a result, the 2005–2009 curriculum framework is still applied as the primary guidance on instruction time.

42. **The policy distinguishes between two components: (a) the *national curriculum* provided by the MoEYS and (b) a *local life skills program,* or LLSP, provided by schools in partnership with parents, local communities, and nongovernmental organizations (NGOs).**[26] The policy indicates that the MoEYS is responsible for the funding and the provision of staff, facilities, and resources for the national curriculum, whereas the schools, parents, their communities, local community organizations, and NGOs are expected to design, fund, staff, and provide the facilities and equipment for the delivery of the LLSP.

43. **The national curriculum component of the policy prescribes 25 lessons per week for primary education grades (1–6), five lessons per day, 40 minutes each,**[27] **and 5 days per week, for 38 weeks per year.**[28] The number of lessons per week is specified across five curriculum subjects: (a) Khmer; (b) math; (c) science; (d) social studies, including art; and (e) physical and health education. Lessons per week for these five subjects vary by grade; see Table 3. Khmer and math are prioritized in lower grades (1–3), taking up to 20 lessons per week (that is, 80 percent of the available instruction time within the national curriculum). Science and social studies take up only three lessons (12 percent of available time) in lower grades but are increased in higher grades (grades 5 and 6) to nine lessons (36 percent).

44. **The LLSP component of the policy prescribes between two and five lessons per week, 40 minutes per lesson.** The aim of the LLSP is to give communities the opportunity to provide training to students on specific life skills that are particularly relevant in their local communities. It also aims to provide schools with time in the curriculum for extracurricular activities such as social services and youth movement activities. Schools and local communities are thus expected to design their own lessons, and the content is at their discretion. However, the MoEYS encourages local communities to provide foreign language classes.[29]

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[26] MoEYS. 2004. *Policy for Curriculum Development 2005–2009*. Phnom Penh: MoEYS, pp. 6–7.

[27] For lower-secondary (grades 7 to 9) as well as upper-secondary education (grade 10), the national curriculum component prescribes 30 *lessons* per week of 50 minutes each, and for upper-secondary grades 11 and 12 the curriculum prescribes 32 *hours* per week.

[28] 38 weeks per year is equal to the OECD average. See OECD. 2023. *Education at a Glance 2023*. Paris: OECD, p. 359.

[29] Foreign language classes are not part of the 2005–2009 primary education national curriculum. Foreign languages are proposed in later curriculum revisions but have not been implemented.

Table 3: Cambodian public primary education curriculum overview by grade, subjects, and number of lessons per week

	Number of lessons (*40 minutes per lesson*)					
	Grade 1	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**
Khmer	13	13	13	10	8	8
Math	7	7	7	6	6	6
Science	3	3	3	3	4	4
Social Studies (including Art)				4	5	5
Physical (and Health) Education	2	2	2	2	2	2
Subtotal National Curriculum	**25**	**25**	**25**	**25**	**25**	**25**
LLSP	**2–5**	**2–5**	**2–5**	**2–5**	**2–5**	**2–5**
Total	**27–30**	**27–30**	**27–30**	**27–30**	**27–30**	**27–30**

Source: 'Policy for Curriculum Development 2005–2009'.

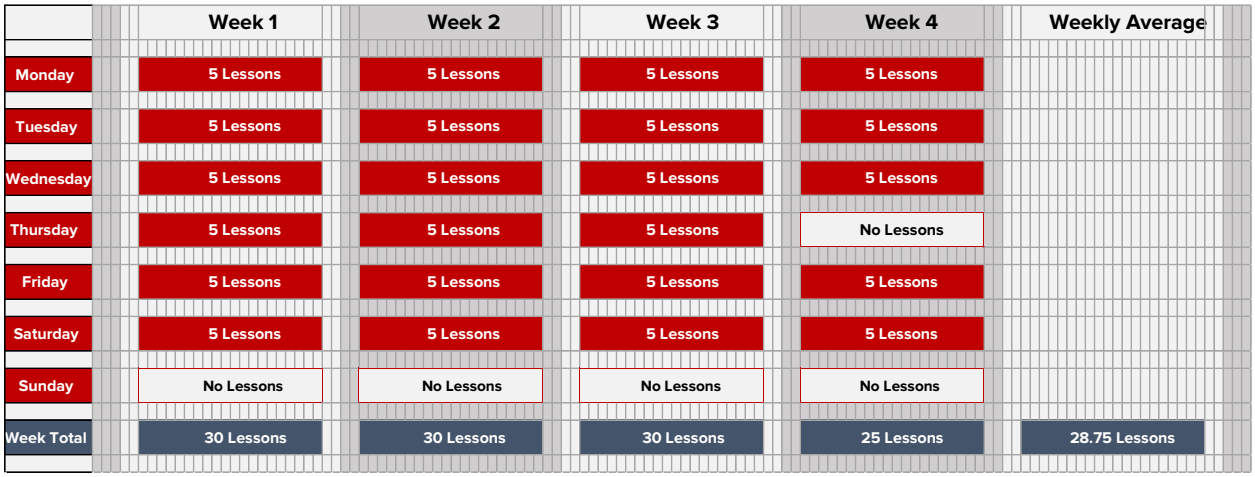
45. **The policy is not specific on the total intended instruction time in primary education (that is, it ranges from 27 to 30 lessons per week and 684 to 760 hours *per year*).** The national curriculum consists of 950 lessons or 633 hours per year, but the LLSP component consists of 76 to 190 lessons or 51 to 127 hours *per year.* The policy's two combined components prescribe 27 to 30 lessons per week, 40 minutes per lesson, for 38 weeks per year, resulting in 1,026 to 1,140 lessons, or 684 to 760 hours per year.

Instruction Time in the School Week Schedule

46. **However, currently primary schools understand the intended instruction time target to be 30 lessons per week (except once every 4 weeks only 25 lessons), resulting in 1,093 lessons or 728 hours *per year.*** This is based on additional MoEYS guidance issued annually, instructing primary schools to provide (*at least*) five lessons per day, for 5 days per week (Monday-Tuesday-Wednesday-Friday-Saturday) and provide remedial classes (five lessons of 40 minutes each) on Thursdays, with the exception of one Thursday every 4 weeks used for technical meeting with teachers and the school management; see Figure 3.[30] This means primary schools understand intended instruction time to be five lessons per day for (*on average*) 5.75 days per week (25 'regular' lessons per week plus an additional 3.75 lessons, on average, per week for remedial classes), resulting in 28.75 total lessons per week and 1,093 lessons or 728 hours per year.

[30] See MoEYS. 2024. *Guidelines on the Operation of Public Primary Schools 2023–2024.* Phnom Penh: MoEYS. Each primary school class also has a lesson schedule issued by the MoEYS identifying lesson start and end times for each subject in the curriculum.

Figure 3: Five lessons per day, 6 days per week, except for one Thursday every 4 weeks - Illustrated



Source: MoEYS Guidelines on the operation of public primary schools 2023–2024..

47. **The 728 hours per year of total intended instruction time in Cambodia's primary education is at the lower end of the global average range, well below the OECD average, and below the ASEAN average.** A 2008 Education for All (EFA) monitoring report estimated that global averages of intended instruction time in primary education vary from 702 hours per year (in grade 1) to 810 hours per year (in grade 6).[31] This puts Cambodia's combined average of 728 hours at the lower end of the average. Moreover, in 2023, the OECD estimated an average of 805 hours of intended instruction time across primary schools in its 38 member states, although there is considerable variation among OECD members, typically ranging from 650 hours per year (for example, Korea, Finland, and Estonia) to 1,000 hours per year (for example, Australia, Colombia, and Denmark). The average instruction time for primary education across ASEAN member countries is 826 hours per year (see Section 4 for a more detailed comparison).[32]

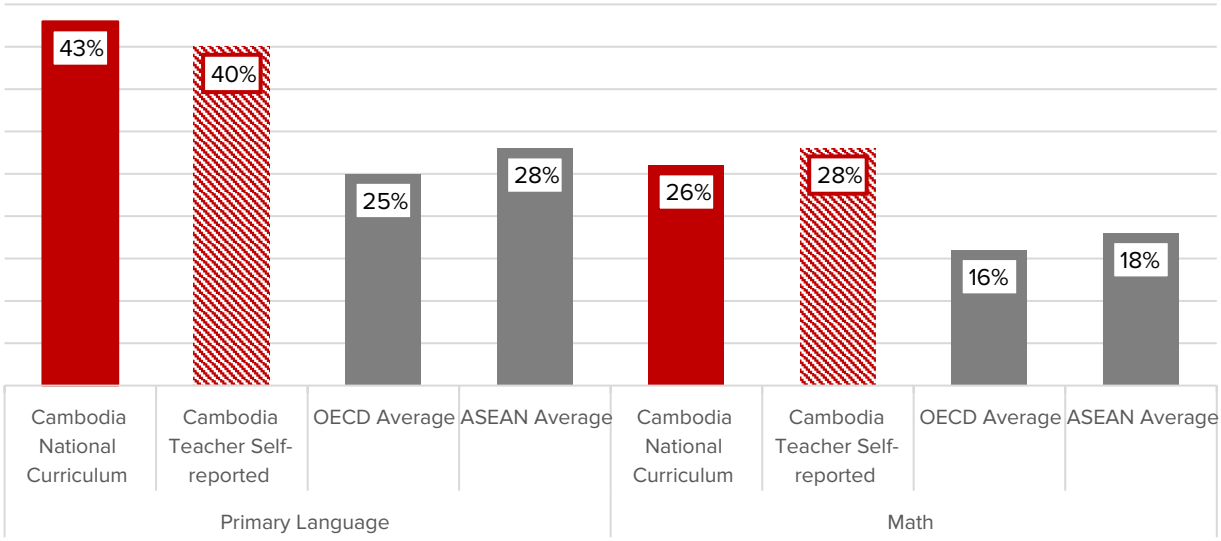
48. **However, the share of the national curriculum allocated to core subjects (Khmer and math) is unusually high compared to OECD and ASEAN averages; see** Figure 4. The Cambodian primary education national curriculum allocates 69 percent of its lessons to core subjects (61 percent if the LLSP component is included and not dedicated to core subjects), out of which 43 percent is to Khmer and 26 percent to math. OECD countries, on average, spent 41 percent of total intended time on core subjects (OECD member states typically range between 33 and 55 percent), of which 25 percent is on language (reading, writing, and literature) and 16 percent on math.[33] ASEAN member countries allocate, on average, 46 percent on core subjects, of which 28 percent is on language and 18 percent on math (see Section 4).

[31] UNESCO. 2007. *Education for All 2008 Global Monitoring Report: Education for All by 2015 Will We Make It?* Paris: UNESCO, p. 73.

[32] This ASEAN average excludes Cambodia, Singapore, and Brunei.

[33] OECD. 2023. *Education at a Glance 2023. Paris:* OECD, p. 363.

Figure 4: Share of curriculum allocated to core subjects (primary language and math), Cambodia, OECD, and ASEAN

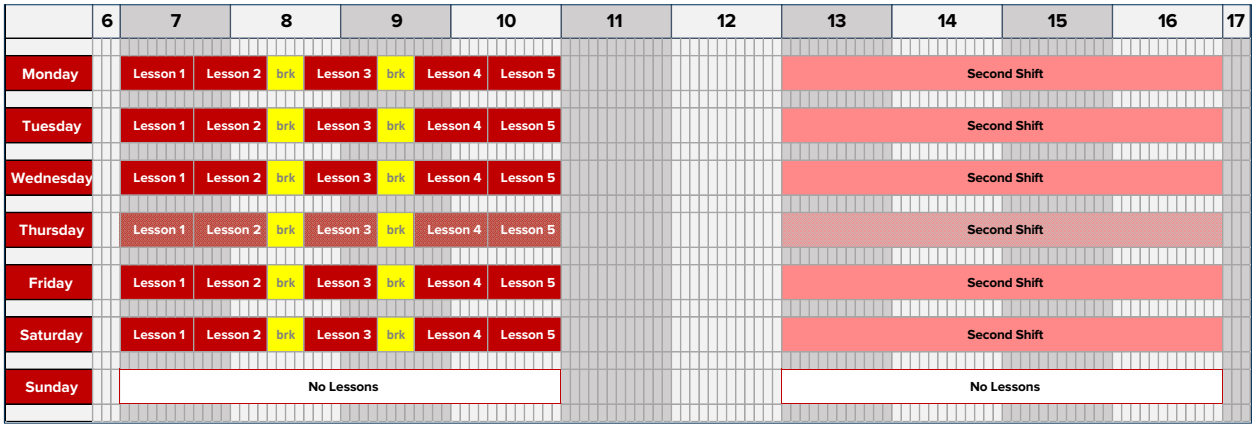


Source: Cambodia national curriculum: 'Policy for Curriculum Development 2005–2009'; Cambodia self-reported: World Bank's 2024 Teacher Survey; OECD average: Education at a Glance 2023, OECD (2023); and ASEAN 7 average: Southeast Asian education experts.

Note: ASEAN 7 includes Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Thailand, and Viet Nam.

49. **The MoEYS also provides guidance on school day and week schedules and how to organize two shifts (for different groups of students) to be taught on the same day.** The MoEYS instructs primary schools to conduct the first shift from 7 a.m. till 11 a.m. (five lessons, 40 minutes each and two breaks, 20 minutes each, covering 4 hours) and the second shift from 1 p.m. till 5 p.m. (with an identical structure for lessons and breaks); see Figure 5.

Figure 5: MoEYS prescribed weekly lessons schedule for first and second shift (split-day configuration) - illustrated



Source: MoEYS Guidelines on the operation of public primary schools 2023–2024.

Staffing Norms and Allocated Teaching Hours

50. Furthermore, public primary school teachers are expected to teach 25 *hours* per week, according to the MoEYS staffing norms.[34] Public school teachers are expected to work 40 hours a week (like all civil servants),[35] although the number of hours spent teaching varies across programmatic levels; see Table 4. Primary school teachers are not subject specialized (that is, there is only one type of general primary school teacher) and are typically assigned to teach all subjects to a single class. Primary school teachers are expected to spend 25 *hours* per week 'teaching', significantly more than the 16 to 18 hours per week of teaching expected of their colleagues in preschool and secondary schools. Primary school teachers are expected to spend the remaining 15 hours in a work week on 'preparation', which, according to the MoEYS staffing norms, *includes supporting slow learners (remedial teaching),* preparing lesson plans, marking student homework and exams, engaging with parents, and doing research.[36]

Table 4: Teacher working hours, in-class teaching hours, staffing norms, and in-class teaching hours per class

	Preschool	Primary	Lower secondary	Upper secondary	
	—	Grades 1–6	Grades 7–9	Grade 10	Grades 11–12
Total teacher working hours (per week)	40	40	40	40	40
• *In-class teaching hours*	*18*	*25*	*18*	*16*	*16*
• *Preparation hours*	*12*	*12*	*22*	*24*	*24*
• *Homeroom hours*	*6*	*2*	*4*	*4*	*4*
• *Technical team coordination ours*	*4*	*1*	*2*	*2*	*2*
Teachers per class (staffing norm)	1.200	1.150	1.833	2.062	2.187
Weekly in-class teaching hours *per class*	**21.60**	**28.75**	**33.00**	**33.00**	**35.00**

Source: MoEYS Staffing Norms 2018 (Instruction 20 -សេចក្តីណែនាំស្តីពីនិយាមប្រើនបុគ្គលិក).

51. In-class teaching hours of 25 (per teacher) per week, and thus 950 hours per year (that is, 25 × 38 weeks), is fairly high compared to international averages but not outside the typical bandwidth.[37] Primary school teachers in the European Union are expected (on average) to teach in class for 738 hours per year, and the OECD average is 791; see Figure 6. However, individual OECD countries' in-class teaching hours typically fall between 600 and 1,000 hours per year. Cambodia's norm for primary school teachers is similar to the United States (1,004 hours per year), Colombia (960 hours per year), the Netherlands (940 hours per year), and France (900 hours per year). The ASEAN average is 828 hours per year in primary education, but Cambodia's norm is equal to Lao PDR's (950 hours per year), and higher than Thailand (800 hours per year). Note that data collection on this indicator is challenging, as countries do not uniformly apply in-class teaching definitions (for example, in some countries remedial teaching might not be considered 'part of in-class teaching hours', while in others it may be included).

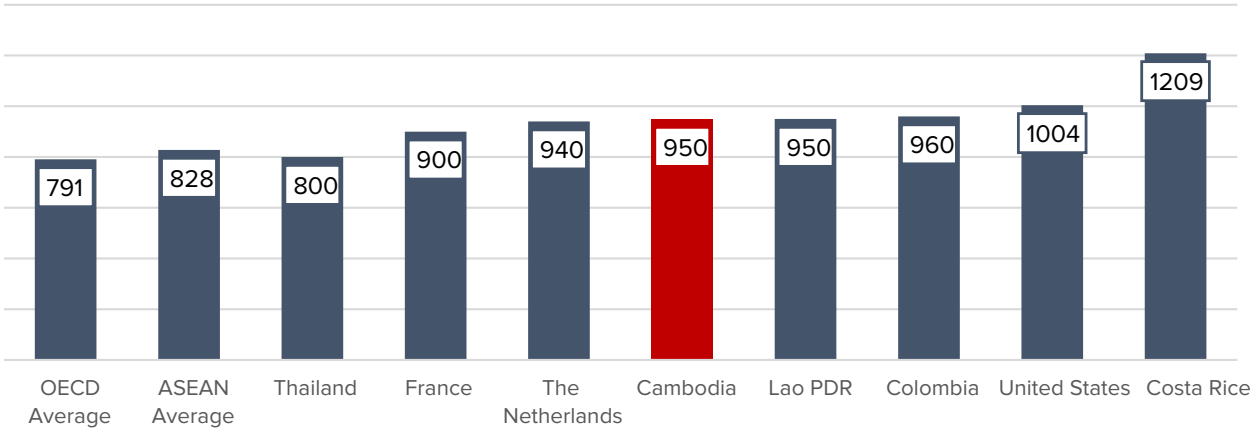
[34] MoEYS. 2018. *Staffing Norm (Instr5uction 20),* p. 2.

[35] Reference to civil service law.

[36] MoEYS. 2018. *Staffing Norm (Instruction 20),* p. 2.

[37] OECD. 2023. *Education at a Glance 2023.* Paris: OECD, p. 373.

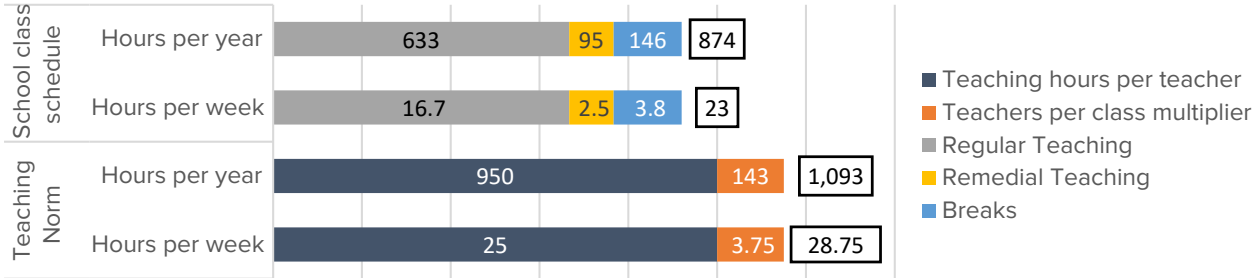
Figure 6: Number of annual teaching hours per teacher in primary education



Source: Education at a Glance 2022, OECD (2022), Indicator D4.

52. **Primary schools should be allocated 1.15 teachers *per class*, according to the MoEYS staffing norms, combined allocating a total of 28.75 *hours* of teaching *per class* (25 hours per teacher × 1.15 teachers per class).** A typical primary school with six classes (one class per grade) should thus be assigned almost seven teachers (6.9 teachers specifically), resulting in 28.75 teaching hours per class *per week* and 1,093 hours per class *per year*. However, these allocated teaching hours are not reflected in the typical primary school week schedule (7 a.m. till 11 a.m.) where teachers teach 25 *lessons* per week rather than 25 *hours*. The schedule prescribes 4 hours per day (including two breaks of 20 minutes each) for 5 days a week, adding up to 20 hours per week. Even when including the Thursday remedial classes (4 hours, three times every 4 weeks), which are formally excluded from in-class teaching time in the MoEYS staffing norm,[38] it still only adds up to 23 hours on average per week; see Figure 7.

Figure 7: Instruction time per class gap between prescribed school lesson schedule and the staffing and teaching norms



Source: School class schedule: MoEYS Guidelines on the operation of public primary schools 2023–2024; Teaching norm: MoEYS Staffing Norms 2018 (Instruction 20 -សេចក្តីណែនាំស្តីពីនិយោមប្រើនបុគ្គលិក).

53. **The teaching hours allocated to classes by the MoEYS staffing norms are at least 25 percent higher than the prescribed instruction time (in the curriculum) and the weekly schedule guidance,** and thus teachers are teaching less than what is expected of them by the MoEYS. This discrepancy can also be illustrated by the difference between the annual intended instruction time (728 hours per year) and the allocated annual teaching hours according to the staffing norms (950 hours per teacher × 1.15 teachers per class = 1,093 hours per year). The intended instruction time is 33 percent lower than the allocated teaching time in the staffing norms. Although allocating somewhat more teaching hours than the curriculum requires makes sense (to mitigate the impact of teacher absenteeism), the difference is considerable and illustrative of the gap between how much teachers teach and what is formally expected of them.

[38] MoEYS. 2018. *Staffing Norm (Instruction 20)*, p. 2.

3.2 Self-reported Instruction Time

54. **This subsection describes and analyzes teacher (and school principal) self-reported data on the curriculum, working hours, and teacher absenteeism.** Primary school teachers across Cambodia have a fairly consistent and accurate understanding of what is expected of them in terms of the curriculum and working hours. Teachers typically report working a full shift (that is, there are few primary schools with excess teachers). However, teachers appear uncertain when it comes to working hours 'outside of class' (that is, working hours in addition to *'in-class teaching'*) such as preparing lessons, scoring tests, reviewing homework, and assisting slow learners. Moreover, many teachers and school principals suggest that there is no effective system to address teacher absenteeism and tardiness.

Curriculum and Weekly Lesson Schedule

55. **On average, teachers describe a typical school week, in terms of number of days, lessons, and subjects, similar to the official curriculum framework and school week schedule instruction provided by the MoEYS.** Almost all the teachers (98 percent) surveyed in the *2024 Survey* (*n = 727)* report teaching 6 days in a typical school week, and almost all teachers (98 percent) report teaching three Thursdays per month. Moreover, almost all teachers (92 percent) report that nearly all their students attend Thursday classes, suggesting that teachers know these *should be* remedial classes, but *in practice* are more or less regular school days.

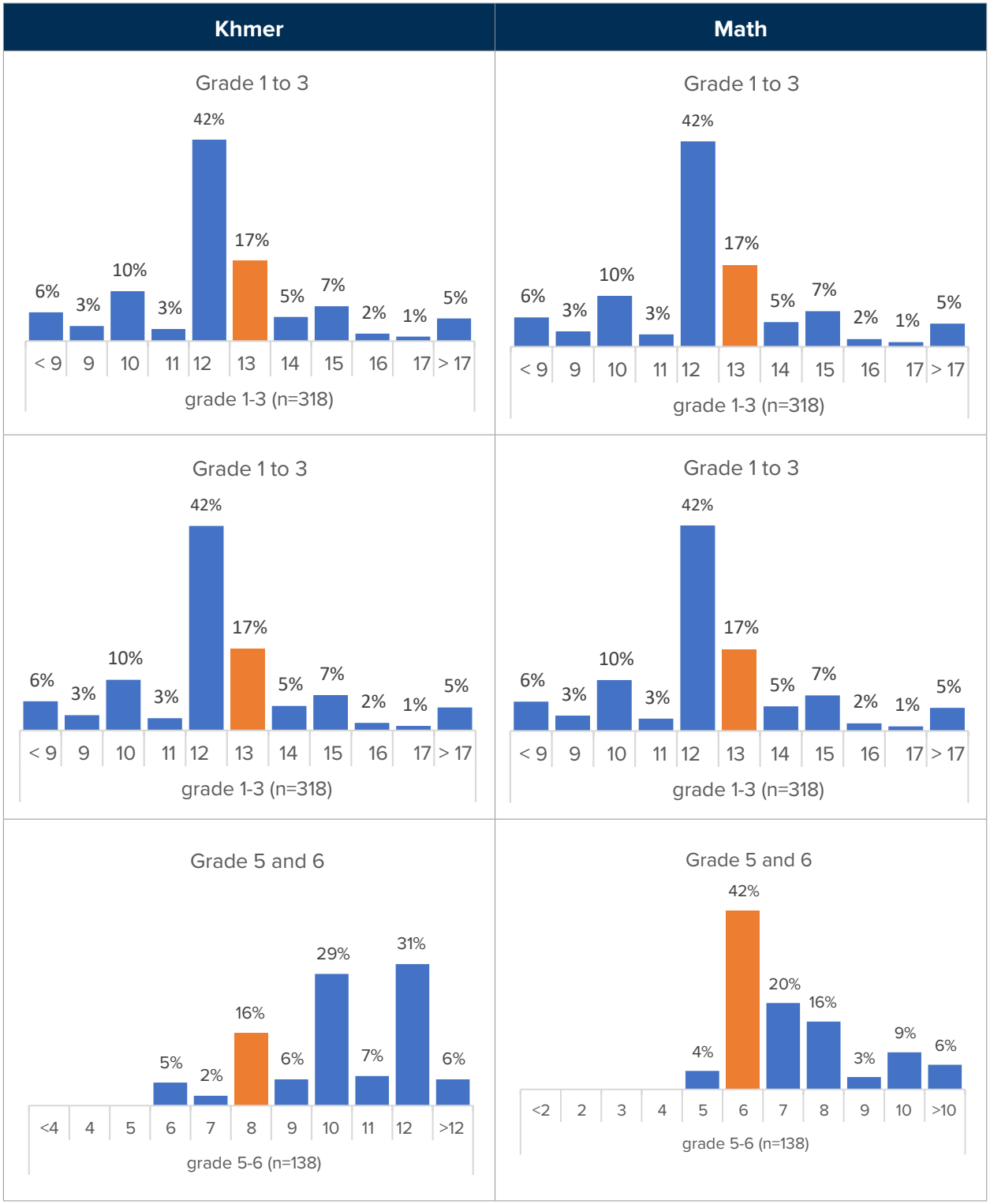
56. **There is slightly more variation in the number and duration of lessons.** About 78 percent of teachers report teaching five lessons per day (consistent with MoEYS' instruction), while 21 percent report teaching only four lessons. The majority of teachers indicate that lessons last 40 minutes (consistent with MoEYS' instruction), whereas 37 percent of the remaining teachers indicate lessons last 45 minutes. Anecdotal evidence suggests some schools have shifted to a '4 × 45 minutes' or '4 × 50 minutes' lesson schedule.

57. **Teachers report providing more lessons on core subjects, especially math, than prescribed by the primary school curriculum.** Teachers in the *2024 Teacher and School Survey* were asked to recall from memory (that is, without consulting MoEYS instructions typically available in classes or principals' offices) how many lessons they took on 'Khmer', 'math', and 'other subjects' in the week before the interview. Thereafter, they were asked to specify the number of lessons for each of the 'other subjects'. The results are broadly aligned with the MoEYS' curriculum instruction, although teachers report spending somewhat more time on core subjects. See Figure 8 for an illustrated distribution of responses regarding the number of sessions for Khmer, math, and other subjects.[39]

58. **Teachers in lower primary grades (1–3) reported slightly fewer 'Khmer' lessons than prescribed, whereas teachers in upper grades (4 and 5–6) reported somewhat more.** Grade 1–3 teachers reported on average 12.3 lessons per week, compared to 13 lessons in the curriculum. Grade 4 teachers reported 10.7 lessons on average, compared to 10 lessons in the curriculum. Grade 5–6 teachers reported 10.7 lessons on average, which is 34 percent more than the 8 'Khmer' lessons prescribed by the curriculum. The weighted average is 11.4 lessons reported, 5 percent higher than the 10.8 'Khmer' lessons prescribed.

[39] These results should be treated with some caution, as a social desirability bias might have resulted in teachers over reporting on core subjects.

Figure 8: Percentage of teachers by self-reported number of sessions (Khmer and math) last week



Source: World Bank's 2024 Teacher and School Survey.

Note: Orange bar indicates the number of sessions prescribed by the curriculum

59. **Teachers across all grades (1–6) reported more 'math' lessons than prescribed by the primary education curriculum.** Grade 1–3 teachers report 8.4 lessons on average, compared to 7 curriculum-prescribed lessons. Grade 4 teachers report 7.4 lessons and grade 5–6 teachers report 7.3 lessons, compared to 6 lessons in the curriculum for grades 4 and 5–6; see Table 5. The weighted average is 7.9 lessons reported, 21 percent higher than the 6.5 'math' lessons prescribed.

Table 5: Teacher self-reported number of sessions last week compared to the curriculum

	Grades 1–3		Grade 4		Grades 5–6		Weighted average	
	Curriculum	Teacher self-reported	Curriculum	Teacher self-reported	Curriculum	Teacher self-reported	Curriculum	Teacher self-reported
Khmer	13	12.3	10	10.7	8	10.7	10.8	11.4
Math	7	8.4	6	7.4	6	7.3	6.5	7.9
Other	7–10	7.3	11–14	10.5	13–16	10.5	9.7–12.7	11.0
Total	**27–30**	**28**	**27–30**	**28.6**	**27–30**	**28.5**	**27–30**	**28.3**

Source: World Bank's 2024 Teacher and School Survey.

60. **Teachers report significantly fewer lessons on physical education and health, 'music and arts', and LLSP.** About 37 percent of teachers indicated not spending any lesson on 'health and physical education'. Only 4 percent of surveyed teachers reported a 'music and arts' class the week before the interview. Music and arts lessons are prescribed by the curriculum, although the number of lessons is not specified. Furthermore, teachers across all grades reported only 0.7 LLSP lessons in the preceding week, compared to the 2–5 lessons prescribed by the curriculum. The latter is consistent with responses from open-ended interviews with teachers and principals, suggesting that the LLSP instruction time is devoted to 'remedial classes' which most students attend and is typically used for regular subjects (that is, mostly Khmer and math).

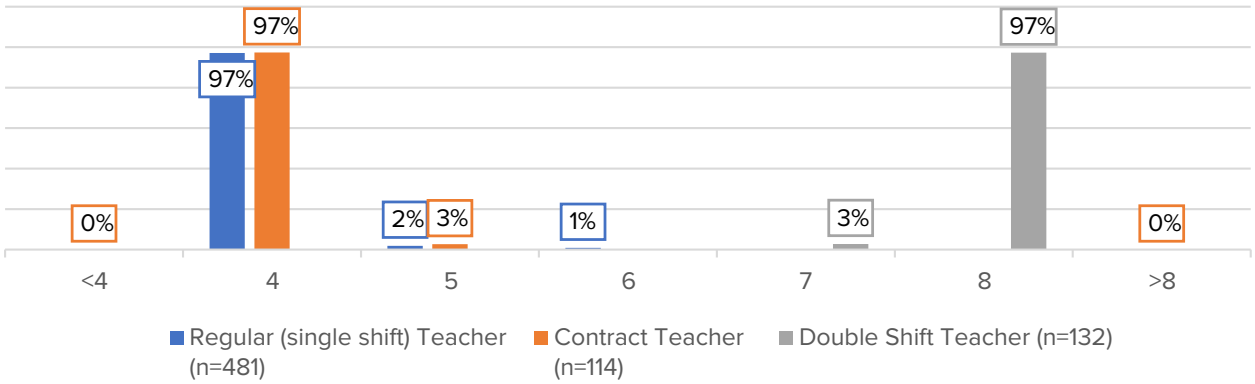
61. **Although teachers dedicate a considerable portion of their teaching hours to Khmer and math, the majority still believe that more time is required to effectively cover these subjects.** According to the teacher survey in 2024, 75 percent of grade 1–3 teachers, 68 percent of grade 4 teachers, and 61 percent of grade 5–6 teachers indicated that they need additional time to teach Khmer. Similarly, for math, 51 percent of teachers in grades 1–3, 54 percent in grade 4, and 64 percent in grades 5–6 reported requiring more time to adequately teach the subject. Most teachers reported 'generally having enough time to cover the curriculum', but also indicate not being able to cover the curriculum in full. Almost one-third of teachers indicated that they covered less than 90 percent of the curriculum in the previous year.

Teaching Hours and Working Hours

62. **Almost all (97 percent) single-shift and contract teachers, in the 2024 survey, report usually *teaching* 4 hours per day at school (that is, including breaks but excluding tutoring).**[40] The remainder of teachers report slightly more than 4 teaching hours per day; see Figure 9. Almost all teachers (96 percent) also report usually teaching 24 hours per week (that is, on a typical six-day school week). Similarly, double-shift teachers typically report teaching 8 hours per day and 48 hours per week (including breaks), although 12 percent of double-shift teachers report working less than 48 hours per week.

[40] Teacher self-reported data on teaching and working hours is vulnerable to biases, but it can still provide important insights into what teachers believe is expected of them. Self-reported data on working and teaching hours is exceptionally susceptible to bias and should *not* be treated as reliable and *accurate* data on actual working and teaching hours. Nonetheless, self-reported data can be useful to assess if teachers accurately *understand* guidelines on working and teaching hours, or if they aware of any guidelines at all. Moreover, self-reported data on working hours can be particularly concerning if they still fall short of the guidelines, as self-reporting biases are typically one directional. Teachers are likely to overreport compared to actual working hours, as they believe this is expected of them. Self-reported data is thus likely an overestimate of actual hours worked, but never (or at least very unlikely) an underestimate. Teachers are also likely to underreport their own absenteeism, late arrivals, and early departures, as it reflects negatively on them.

Figure 9: Teacher self-reported number of in-class teaching hours per day, by contract modality (2024)

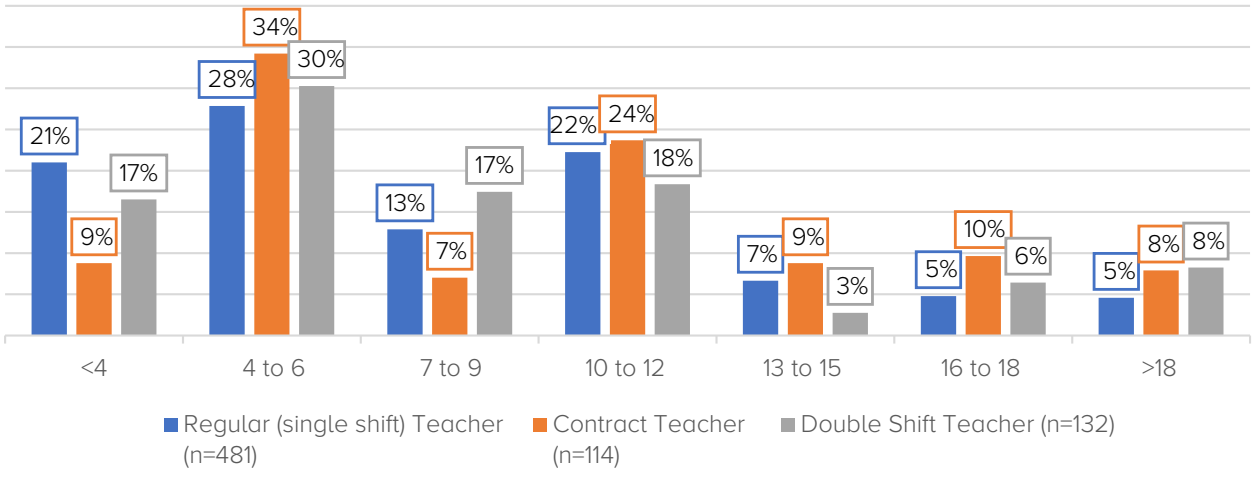


Source: World Bank's 2024 Teacher and School Survey.

63. **This means that teachers report teaching 23 hours per week *on average*, including breaks *and* the three Thursdays of remedial teaching, which falls short of the guidelines on teaching hours.** Considering that teachers report working only three Thursdays per month (as the 4th Thursday is used for technical meetings), the average teaching hours is calculated as 23 hours per week (the average of 3 weeks 24 hours and 1 week at 20 hours). **The near-uniform response pattern suggests that teachers have received an instruction on this and that almost all are aware of the instruction.** It also suggests that teachers believe they are expected to teach fewer hours than what is actually prescribed by the MoEYS teacher norms, especially considering that the guideline of 25 hours per week of in-class teaching excludes remedial teaching.

64. **Importantly, there is considerable variation in the self-reported working hours 'outside of class' (for example, lesson plans and reviewing homework), suggesting (most) teachers do not know what is expected of them, and policies on working hours might not be clearly communicated to teachers.** Unlike daily and weekly teaching hours, where teachers almost uniformly report the same working hours, self-reported data on working hours outside of the class varies considerably, suggesting teachers did not receive clear instructions on what is expected of them besides in-class teaching or at least that most teachers are unaware of such an instruction. About 21 percent of single-shift teachers report usually working less than 4 hours per week outside of the class, another 28 percent report working only 4–6 hours, while 17 percent report working 13 hours or more; see Figure 17.

Figure 10: Teacher self-reported number of working hours outside-of-the-class per week, by contract modality (2024)



Source: World Bank's 2024 Teacher and School Survey.

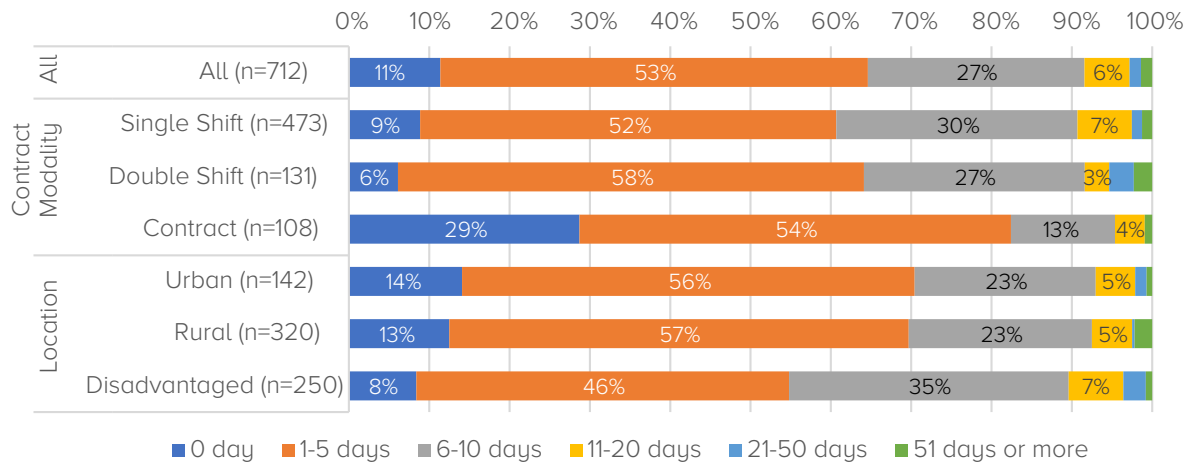
65. **Moreover, teacher self-reported working hours (outside of class and total weekly hours) are considerably lower than the prescribed norms.** Single-shift civil servant teachers report working on average only 8.2 hours outside of class (whereas 15 hours are prescribed by the norms) and 33 hours in total per week (whereas 40 hours are prescribed by the norms). Contract teachers report slightly more working hours 'outside of class' (10 hours per week). Importantly, double-shift teachers do not report working more outside of class than single-shift teachers, which further enforces the impression that teachers do not consider the work beyond in-class teaching as strictly mandatory. There are no significant differences on self-reported working hours between urban, rural, and disadvantaged teachers.

66. **The self-reported data appears to suggest that many teachers barely work outside of class, and some might not work at all beyond their in-class teaching responsibilities.** Considering the very low self-reported data on working hours outside of class (21 percent of single-shift civil servant teachers reported 3 hours or less per week outside-of-class work), and teachers seemingly unaware of rules or guidelines on this (where ambiguity regarding mandatory working hours likely further reduces compliance), many teachers are likely to work very little (if at all) outside of class. This finding is compounded by the very high prevalence of secondary jobs among primary school teachers (see *Teaching Quality in Cambodia's Primary Education - Toward Incentivizing Effort, Performance, and Quality Assurance* (2025), for a more detailed discussion). About 84 percent of teachers in the 2024 survey reported having secondary jobs, typically working an additional 18 hours per week. **The findings suggest that many (or even most) primary school teachers only work one part of the day (morning or afternoon) with important implications for the quality of lesson preparation as well as the MoEYS options for reforming the curriculum and school week schedule. Poor** communication of the policy on 'outside-of-class' working hours to teachers might have partially contributed to this finding as many teachers appear unaware of what is expected of them.

Absenteeism and Accountability

67. **Nearly 90 percent of teachers surveyed in 2024 reported being absent during the last academic year (see Figure 11), with on average 6.6 days absence per teacher.** Contract teachers reported being fewer days absent on average (4.2 days), compared to single-shift teachers (6.8 days) and double-shift teachers (7.9 days). It is important to note that self-reported absenteeism is susceptible to bias. Moreover, about one-third (34 percent) of the teachers reported that school directors usually do not find an alternative way to cover their classes when they are absent. Although a vast majority (95 percent) of teachers claim school directors keep records of teacher absences, only 14 percent of teachers believe their school management *always* takes corrective action when 'teachers are absent without a good reason'. Another 24 percent believe the managements take actions *sometimes,* 41 percent believe they *rarely* take actions, and the remaining 21 percent believe corrective action is *never* taken.

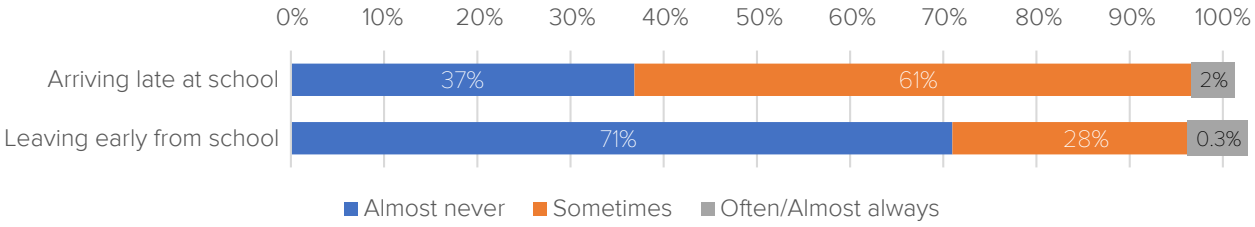
Figure 11: Teacher self-reported number of days absent 'during last academic year' (2024)



Source: World Bank's 2024 Teacher and School Survey.

68. **Teachers report that their colleagues tend to arrive at school late more often than they leave early.** A significant 71 percent of teachers believe that their colleagues *almost never* leave school early, whereas only 37 percent think their colleagues *almost never* arrive late. Additionally, 61 percent of teachers think their colleagues sometimes arrive late, and 2 percent reported that their colleagues are *often* late; see Figure 12.

Figure 12: Teachers (n = 727) report on their colleague's arriving late and leaving early from school (2024)

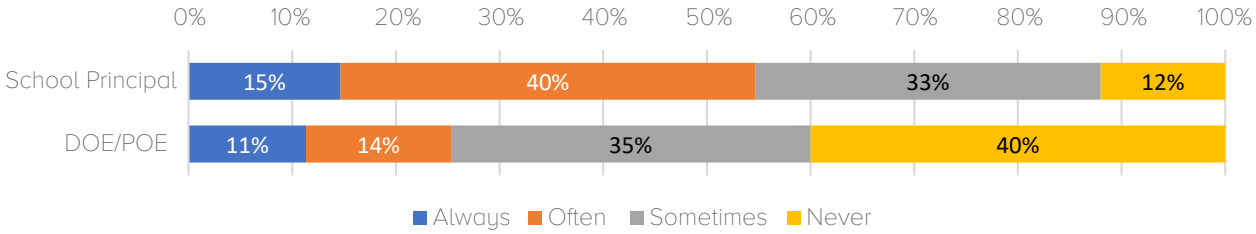


Source: World Bank's 2024 Teacher Survey.

69. **School principals report keeping track of teacher attendance but concede that these records are rarely used by District Education Office (DEO) staff for follow-up.** All principals reported keeping an attendance book, but some rural school principals (7 percent) and disadvantaged school principals (11 percent) were unable to present the attendance book during the 2024 survey's school visit. Only 40 percent of school principals share the attendance record with the DEO. Only 25 percent indicated that the DEO (often or always) takes corrective measures when teachers are absent without good reasons, whereas most reported the DEO taking measures 'sometimes' (35 percent) or 'never' (40 percent) (see Figure 13), suggesting a limited role for the DEO in addressing teacher absenteeism. Most school principals (92 percent) also perceive themselves to be more influential than the school management committee (SMC), with regard to monitoring teacher absenteeism.

70. **However, 55 percent of school principals reported taking measures themselves (often or always)** compared to 12 percent of principals conceding they 'never' took corrective measures. The most common corrective measure reported by principals is a verbal warning (72 percent), followed by a written warning (13 percent). Only in rare cases (3 percent) are teachers fined (that is, a salary deduction) or asked to compensate lost time (2 percent). Many school principals indicated teacher absenteeism to be a key challenge to student learning outcomes.

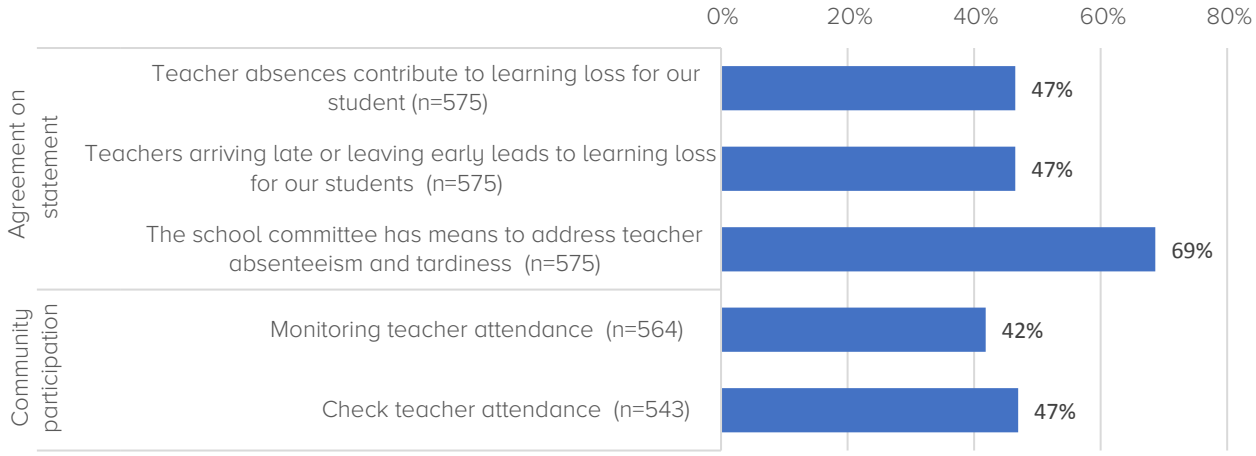
Figure 13: Principal self-reported corrective measures taken by school principal and by DEO/PEO when 'teachers are absent without good reason' (2024)



Source: World Bank's 2024 Teacher Survey.

71. **Nearly half of the local community representatives (and SMC members) surveyed in 2024 believe that time lost due to teacher absenteeism, late arrivals, and early departures contributes to students' learning loss.** Specifically, 47 percent agree (or strongly agree) that teacher absences and tardiness lead to the loss of student learning; see Figure 14. Although 69 percent believe the school committee has the means to address these issues effectively, only 42 percent of committee members reported ever participating in meetings related to monitoring teacher attendance and less than half (47 percent) claimed that the school community checks teacher attendance.

Figure 14: Community representatives (SMC members) perceptions and participation on teacher attendance (2024)

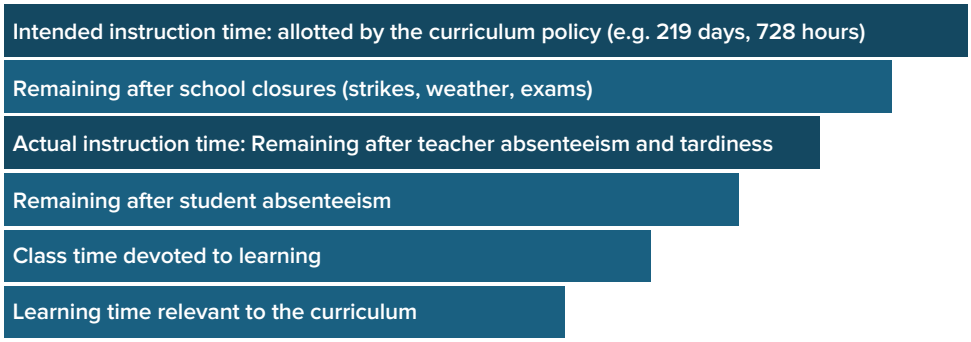


Source: World Bank's 2024 Community Survey.

3.3 Actual Instruction Time

72. **'Actual instruction time' is the duration of instruction *delivered by a teacher in class* and is equal to intended instruction time minus school closures, teacher absenteeism, and teacher tardiness;** see Figure 15.

Figure 15: Instruction time loss model, from intended instruction time to actual instruction time and learning time relevant to the curriculum



Source: Derived from the Instruction Time Loss Model Helen Abadzi 2007 (World Bank IEG), p. 2.

73. **Studies and reliable data on actual instruction time in Cambodia's primary education are *very* scarce, but the available data suggests considerable time loss due to school closures, teacher absenteeism, and tardiness.** Reliably monitoring school closures, teacher absenteeism, and teacher tardiness can be laborious and expensive in itself. Moreover, because teachers, school principals, and local education administrators can be reluctant to transparently share accurate data on school closures as well as teacher absenteeism and tardiness, it requires robust methods such as unannounced school visits, video monitoring, or biometric verifications. This subsection briefly discusses three data sources on actual instruction time. Although each of these sources is imperfect in its own ways, they suggest a considerable impact of teacher absenteeism and tardiness as well as school closures.

74. **A 2015 study on instruction time in Cambodian primary education schools estimated that actual instruction time was 27 percent shorter than intended instruction time (in the 2012–2013 school year).** The study tracked 309 teachers across 91 primary schools in five provinces and used a combination of different verifications methods including *unannounced* school visits to check for teacher attendance, classroom observations, interviews, and the review of student materials. The estimated instruction time loss totaled 50.5 days per school year or 27 percent of total instruction time (the results in 2012–2013 might have been somewhat inflated by additional school closures due to the elections that year). However, rural schools lost an estimated 30 percent of instructional time, compared to 21 percent in urban schools. The estimate was based on the combined impact of teacher absenteeism, shorter lesson durations, additional holidays, and unofficial school closures.

75. **The study highlighted the impact of additional official school closures (due to national political events and student and teacher exams) as well as significant teacher absenteeism (and de facto unofficial school closures) right before and after official holidays.** Teacher absenteeism accounted on average for 10.5 percent of instruction time loss, shorter lesson durations (due to, for example, late starts of the lessons) accounted for 12 percent of time loss, and 'additional holidays and official closures' for another 8 percent.[41] Teacher absenteeism was higher in rural primary schools (12 percent) than urban primary schools (8 percent), and almost half of the teacher absenteeism was explained by what the study termed *'common practice': a situation where teachers, and arguably the community, perceive that schools are not open on particular days before or after special festivals or events, be it religious or non-religious, such as the 'Pchum Ben Day'. Teachers explained that at these times students may be in a holiday mood and that many students do not come to school.*

[41] NGO Education Partnership. 2015. *Teaching Hours in Primary Education Schools in Cambodia*, p. 8.

76. **Importantly, the study did not consider instruction time loss on Thursdays, as Thursday classes were assumed to vary from one school to another and might not be available due to budget constraints.**[42] The rationale for the exclusion of Thursday classes was that they were expected to vary from school to school (some schools would use Thursday classes for life skills or school cleaning activities, while others may use them for remedial classes). Moreover, the running of Thursday classes depended on the availability of budget to support additional payments to individual teachers, and thus the operation of Thursday classes and the learning activities would not be consistent from school to school.[43]

77. **Moreover, Cambodian primary students reported the highest rates of teachers 'often' being absent in the Southeast Asian region in 2019 and the third highest rates of teachers 'often' being late** (after Myanmar and Lao PDR). The 2019 Southeast Asian Primary Learning Metrics (SEA-PLM) comparative learning assessment included data collection on the student *perceptions* of teacher absenteeism and tardiness. About 22 percent of Cambodian primary students in the SEA-PLM sample reported that teachers were often absent, compared to an average 11 percent in the region. Moreover, 19 percent of Cambodian students reported that teachers were often late, compared to an average 15 percent in the region—second only to Myanmar (27 percent) and Lao PDR (26 percent).

78. **Finally, in the 2024 survey conducted for this study, 6 percent of school staff were absent *during a preannounced* school visit, compared to 8.4 percent in 2012, suggesting a slight reduction in absenteeism during this period**.[44] Absenteeism differences between locations (urban, rural, and disadvantaged) and genders (female and male) were statistically insignificant. The most common reasons given by the schools' management for absent staff were 'authorized leave' (38 percent), 'sick leave' (17 percent), and 'unauthorized absence' (14 percent). 'Unauthorized absence', as a reason for absenteeism, was more commonly reported in rural and disadvantaged schools (14.6 percent and 15.2 percent, respectively) compared to urban schools (3.4 percent). The 'unauthorized absence', reported by the school management, is particularly concerning as it seems to suggest that principals are conceding that they cannot hold certain teachers accountable (and it is likely an underestimate due to the *social desirability bias*).

3.4 Discussion

79. **First, instruction time allocated to math is relatively high in Cambodia's primary education, implying that time constraints are not the primary cause for relatively low learning outcomes.** Annual intended instruction time of 728 hours in Cambodia's primary education is at the lower spectrum of global and regional averages; however, the time allocated to Khmer and math is relatively high. Teacher self-report data on the curriculum suggests teachers might in practice even amplify the allocation to core subjects, especially math. Teacher self-reported data suggests student are enjoying on average 11.4 Khmer session per week (that is, 7.6 hours), roughly the equivalent to what is prescribed by studies on the acquisition of literacy skills (that is, at least 90 minutes per day).[45] Although acquiring literacy skills is affected by idiosyncratic language difficulties (that is, Khmer literacy might require more instructional hours to acquire), math skills are less country/language specific. The relatively high allocation of instruction time to math lessons,

[42] Ibid., p. 20. The World Bank 2024 Teacher and School Survey did not find unusually high absenteeism on Thursdays (4.8 percent), although absenteeism was higher on Saturdays (9.4 percent). However, this data is based on preannounced visits (likely resulting in underestimating actual absenteeism). Moreover, the number of schools in the sample (150) is too small to make accurate and statistically significant statements on absenteeism per day. Teacher absenteeism is likely a function of school management practices.

[43] Ibid., p. 20.

[44] Importantly, preannounced visits tend to underestimate absenteeism on a typical school day.

[45] World Bank. 2021. *Attaining the Learning Target: A Policy Package to Promote Literacy for All Children*. Washington, *DC:* World Bank, p. 18.

combined with relatively poor performance on math exams, suggests there are moderating factors (for example, quality of teaching, how effectively the time is used) impeding learning and that simply further increasing math instruction time might yield little benefits.

80. **Second, the level of compliance to (existing) staffing norms and HR regulations will be critical for the MoEYS' policy options for increasing instruction time and their associated costs.** There is a significant discrepancy between intended instruction time in primary education (728 hours per year), how much teachers are expected to teach (950 hours per year), and how much teaching hours are allocated per class (1,093 hours per year) according to the staffing norms. In theory, the teacher staffing norms and working hours regulation would allow the MoEYS to increase instruction time to 1,000 hours per year or more, without incurring additional recurrent salary costs. While in practice it might not be possible to ensure full compliance to norms and regulations, the level (or degree) of compliance will be critical for determining reform options and their costs.

81. **Third, many primary school teachers appear to work only one part of the day, and very few hours outside of class, which impedes student learning and would obstruct the implementation of a full-day school curriculum.** Teachers demonstrate an accurate understanding of the weekly lesson schedule, but they are uncertain what is expected of them in terms of 'outside-of-class' working hours, and many teachers concede working very little 'outside of class'. This almost certainly reduces their time on activities known to improve student learning (for example, preparing lesson plans and supporting slow learners). Moreover, with many teachers having secondary jobs, see *Teaching Quality in Cambodia's Primary Education - Toward Incentivizing Effort, Performance, and Quality Assurance* (2025), the other part of the day (that is, mornings or afternoons), they are very reluctant to distribute their teaching hours across the whole day, in a full-day curriculum schedule, as a single lesson scheduled in the afternoon could prevent them from working elsewhere entirely. However, in a full-day lesson configuration, it is (almost) impossible to schedule all the lessons of an individual teacher in only the morning *or* afternoon.

82. **Finally, the impact and efficiency of reforms increasing instruction time will be moderated by the extent to which the MoEYS is able to effectively reduce time loss due to school closures and absenteeism.** The limited available data on actual instruction time in primary education highlights the instruction time loss due to school closures (official and unofficial), in addition to teacher absenteeism and tardiness, and suggests this phenomenon might be exceptionally prevalent in Cambodia. Actual instruction time might thus be considerably lower than Cambodia's intended instruction time, resulting in diminishing returns on investments in additional intended instruction time. Moreover, addressing time loss due to school closures (official and unofficial), through stricter enforcement of compliance to the school year calendar, might be one of the easiest and most cost-effective options to increase *actual* instruction time.

4 Primary Education Instruction Time - Across Southeast Asia

83. This section describes and analyzes primary education data on instruction time across Cambodia's regional peers in the ASEAN. For this study, education experts and researchers across eight ASEAN members states (Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Thailand, and Viet Nam)[46] were asked to collect data on primary education instruction time (that is, the curricula or policies with guidance on instruction time). Cognizant of the potential discrepancies between formal curricula and commonly practiced school day schedules (in some countries primary schools typically provide substantially more lessons than the minimum requirements of the curriculum), experts were also asked to describe the schedules of *'a typical school day for a typical primary school student',* so as to provide a proxy indicator for the variation between intended instruction time and instruction time on a typical day.[47]

84. The data and analyses presented in this section should be treated with caution, as they come with important caveats and limitations. First, not all ASEAN member states have identified simple, uniform national policies on instruction time in primary education. For example, in Indonesia, education policies are (partly) decentralized, allowing local governments to identify their own primary education curriculum priorities. Viet Nam has identified a national curriculum policy, but within this framework, authorities have been considerably devolved, allowing individual districts or even schools to vary in implementation. Lao PDR has a curriculum that differentiates between rural and urban schools.

85. Moreover, ASEAN countries have not consistently demarcated national curricula standards and vary in implementation and compliance. In some countries, discretionary, local, or voluntary segments of the curriculum are not considered part of the national curriculum and not narrowly defined (similar to the Cambodian policy that distinguishes between a national and local component and does not specify the exact number of local lessons, see subsection 3.1), whereas in other countries they are specified in the national curriculum instructions. Moreover, most countries do not differentiate between regular lessons and examination, but some countries exclude exam weeks from the curriculum framework. Most countries specify the number of lessons per week, but some identify a bandwidth of minimum and maximum lessons per week. Furthermore, in some countries, there is considerable variation between the instruction time prescribed by the curriculum and the typically applied norm at schools. At the time of writing this report, in several ASEAN countries' curriculum, reforms were ongoing and in various stages of being rolled out across primary schools.

86. The comparative data presented in this section primarily aims to *illustrate the regional variations* in terms of instruction time, the structure of the curricula, school day schedules, and the decisions made by policy makers. The comparative overview of instruction time across ASEAN member states describes a spectrum of policies and decisions made by education policy makers across the region and illustrates the implications of these decisions on the curriculum and the instruction time provided to primary school students. However, the data presented in this section should not be treated as an accurate and comprehensive description of the full variation of instruction time frameworks across Southeast Asia.

4.1 Total Intended Instruction Time

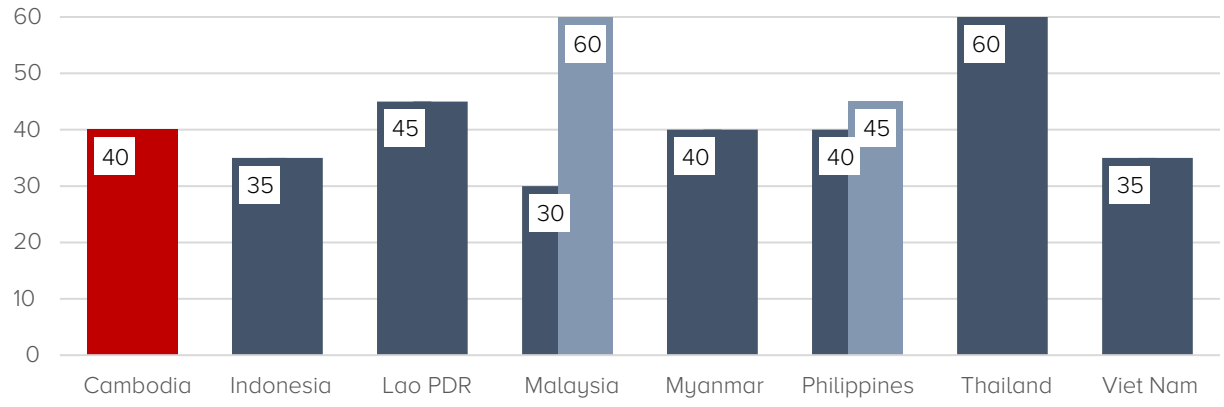
87. Across ASEAN countries, a lesson, or class session, typically lasts between 35 and 45 minutes in primary schools, although in Thailand lessons last 60 minutes; see Figure 16. In Malaysia,

[46] Covering 8 out of 10 ASEAN member states. All member states except Brunei and Singapore.

[47] This is not an accurate indicator for *actual* instruction time, for this would require a survey to correct for school closures, teacher absenteeism, and tardiness.

lessons last either one term (30 minutes) or two terms (60 minutes), and in the Philippines, lessons last 40 minutes in the first two grades and 45 minutes in the grades thereafter (grades 3 to 6). In Cambodia, as well as Indonesia, Myanmar, and Viet Nam, curricula are prescribed in terms of *lessons*, whereas in Lao PDR, Malaysia, and the Philippines, curricula are prescribed in *hours* (and in Thailand, lessons are equal to hours). In most ASEAN countries, primary education includes grades 1 to 6, but in Lao PDR, Myanmar, and Viet Nam it only includes grades 1 to 5.

Figure 16: Duration (minutes) of lessons in the primary education curriculum across ASEAN member states

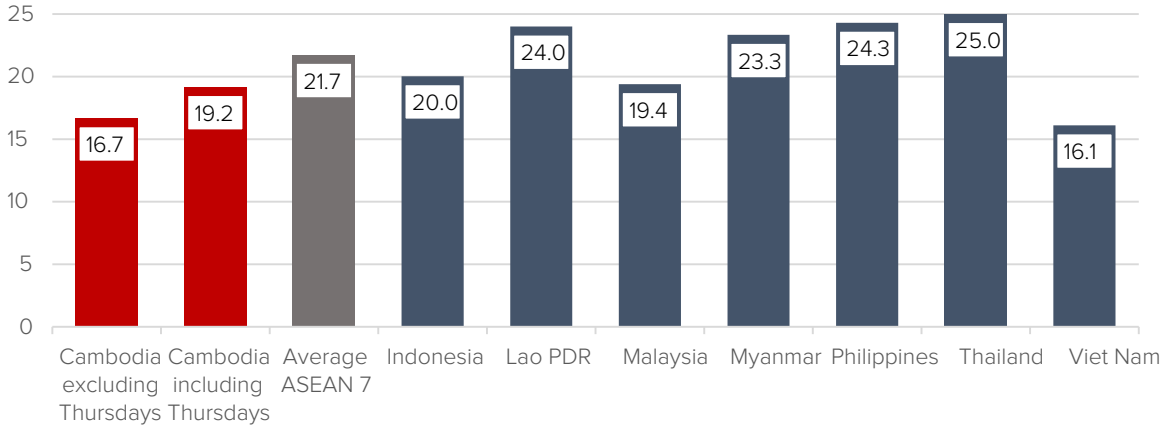


Source: World Bank staff calculations based on data collected by education experts across ASEAN member states.

Note: Data is included to illustrate regional variations and should not be treated as a comprehensive and accurate description of instruction time in individual countries.

88. Across Cambodia's ASEAN peers, the average intended instruction time (that is, the mandatory curriculum time) is 21.7 hours (that is, 21 hours and 44 minutes) per *school week* in primary education.[48] This ASEAN average is significantly more than the mandatory 16.7 hours per week in Cambodia (excluding remedial teaching on Thursdays) and more than the 19.2 hours in an average Cambodian school week schedule; see subsection 3.1. There is some variation across ASEAN countries (see Figure 17), where intended instruction time typically varies between 19 and 25 hours per week. Viet Nam, with 16.1 mandatory hours per week, is somewhat of an outlier. However, instruction time during a typical day for a typical primary student in Viet Nam (as well as Malaysia) is considerably longer; see Figure 24 later in this section.

Figure 17: Total intended instruction time (hours per week) averaged across primary school grades



Source: World Bank staff calculations based on data collected by education experts across ASEAN member states.

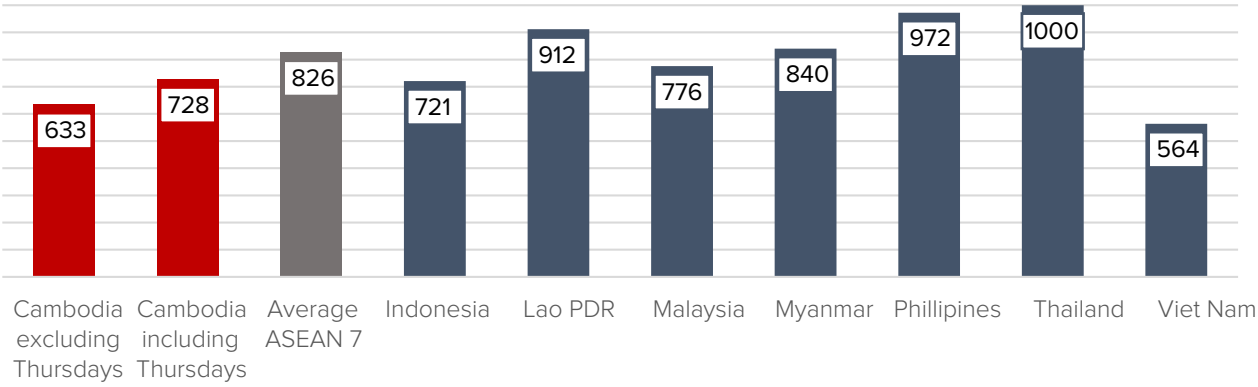
Note: Data is included to illustrate regional variations and should not be treated as a comprehensive and accurate description of instruction time in individual countries.

[48] These averages were calculated by converting all curricula to hours and taking averages across grades.

89. **Primary schools across ASEAN member states are typically intended to be open between 36 and 40 weeks per year, with the remaining weeks closed for official school holidays.** Cambodia's primary schools are intended to be open 38 weeks per year (similar to Lao PDR), whereas primary schools in Malaysia, the Philippines, and Thailand are open 40 weeks per year; primary schools in Indonesia and Myanmar are open 36 weeks per year; and in Viet Nam primary schools are open only 35 weeks per year.

90. **Average annual intended instruction time (hours per week × weeks per year) is 826 hours per *year* across Cambodia's ASEAN peers, compared to 633 mandatory hours in Cambodia and 728 hours including Thursday remedial teaching.**[49] Annually, intended instruction time (mandatory) varies from 564 hours per year in Viet Nam (although primary schools in Viet Nam typically provide considerably more hours per year) to 1,000 hours per year in Thailand; see Figure 18. This ASEAN yearly average is slightly higher than the 805 hours average instruction time per year in OECD countries (where countries typically vary between 650 and 1,000 hours) and higher than the average range found globally in 2010 (702 hours for grade 1 to 810 hours for grade 6).[50]

Figure 18: Total intended instruction time (hours per year) averaged across primary school grades



Source: World Bank staff calculations based on data collected by education experts across ASEAN member states.

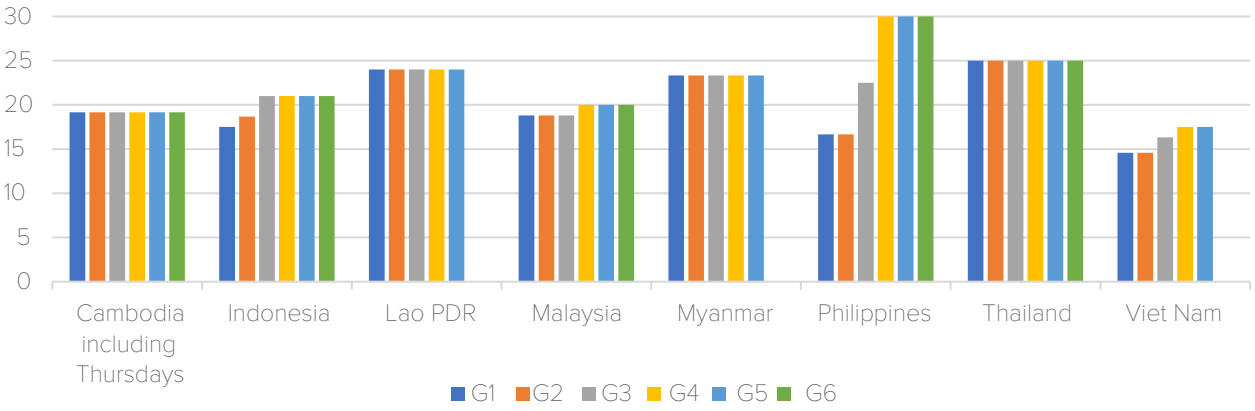
Note: Data is included to illustrate regional variations and should not be treated as a comprehensive and accurate description of instruction time in individual countries.

91. **In half of the eight ASEAN countries assessed, intended instruction time increases in higher grades of primary school, whereas in the other half, instruction time is equal across all grades.** In Lao PDR, Myanmar, and Thailand, intended instruction time is allocated equally across all primary school grades, similar to Cambodia's primary education curriculum. However, in the curricula of Indonesia, Malaysia, and Viet Nam, instruction time is *somewhat* increased in higher grades, and in the Philippines, intended instruction time in grades 4 to 6 is almost *doubled* compared to grades 1 and 2; see Figure 19.

[49] Multiplying the number of intended school weeks by the number of intended instruction hours per week.

[50] UNESCO. 2007. *Education for All 2008 Global Monitoring Report: Education for All by 2015 Will We Make It?* Paris: UNESCO, p. 73.

Figure 19: Total intended instruction time (hours per week) by grade



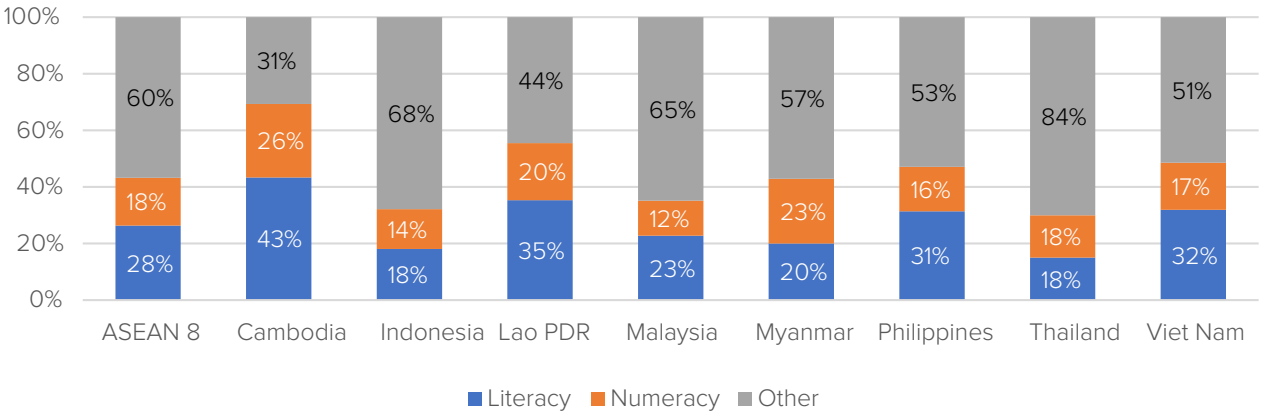
Source: World Bank staff calculations based on data collected by education experts across ASEAN member states.

Note: Data is included to illustrate regional variations and should not be treated as a comprehensive and accurate description of instruction time in individual countries.

4.2 Core Subject Intended Instruction Time

92. **Cambodia's primary education (national) curriculum allocates 43 percent of intended instruction time to primary language acquisition (Khmer) and 26 percent to math, the highest relative shares across the region.** ASEAN countries, on average, allocate 46 percent of intended instruction time to core subjects (primary language and math), of which 28 percent to primary language and 18 percent to math; see Figure 20. The variation across countries is considerable, with Indonesia, Malaysia, and Thailand allocating only 32–38 percent of intended instruction time to core subjects, whereas Cambodia allocates 69 percent to core subjects.

Figure 20: Share (as percentage of total intended instruction time) allocated to core subjects (primary language and math)



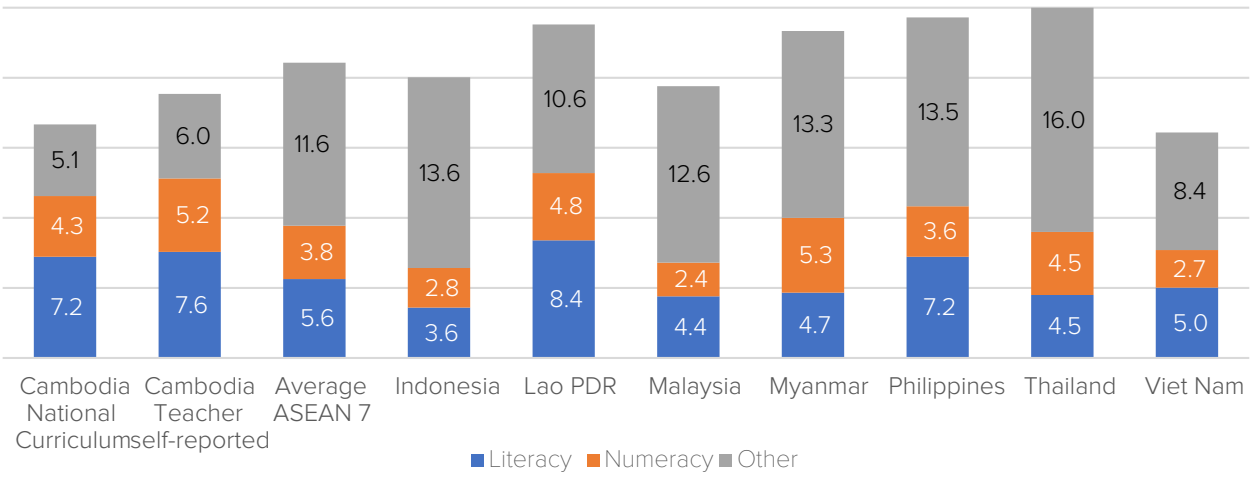
Source: World Bank staff calculations based on data collected by education experts across ASEAN member states.

Note: Data is included to illustrate regional variations and should not be treated as a comprehensive and accurate description of instruction time in individual countries.

93. **Even in absolute terms, Cambodia's intended instruction time allocation to core subjects, on average 11.5 hours per week, is one of the highest in the region.** Although total intended instruction time in Cambodia's primary education curriculum is lower than the average among its regional peers, Cambodia's intended instruction time allocated to core subject is still considerable, as 69 percent of total time is allocated to core subjects. Cambodia's 11.5 hours allocated to core

subjects is higher than the ASEAN average (9.7 hours) and second only to Lao PDR (13.2 hours); see Figure 21. When using teacher self-reported data from the 2024 survey (see subsection 3.2), Cambodia's primary school teachers claim to spend on average 12.8 hours on core subjects, of which 7.6 hours on Khmer and 5.2 hours on math. However, Indonesia and Malaysia each allocated less than 7 hours a week to core subjects.

Figure 21: Absolute intended instruction time allocation (hours per week) to core subjects (primary language and math)

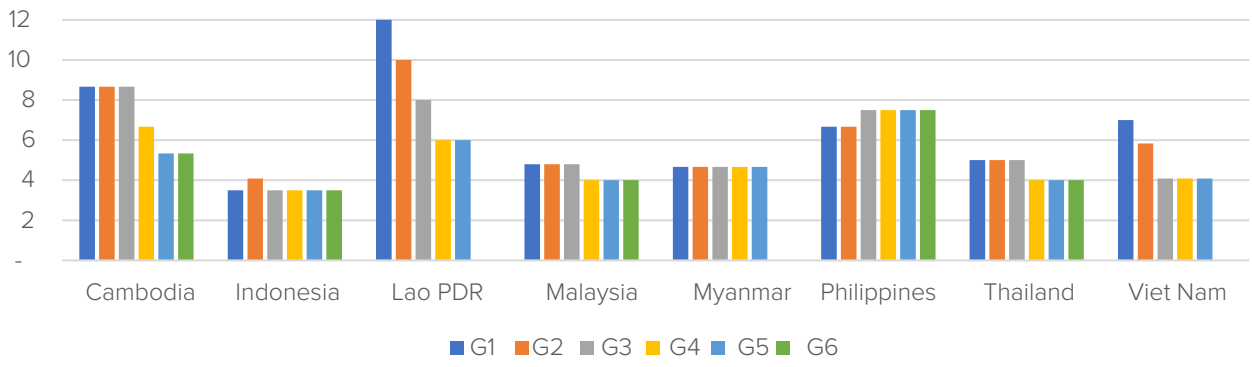


Source: World Bank staff calculations based on data collected by education experts across ASEAN member states.

Note: Data is included to illustrate regional variations and should not be treated as a comprehensive and accurate description of instruction time in individual countries.

94. In half of the ASEAN countries, intended instruction time allocated to primary language decreases progressively across primary school grades. Cambodia's (national) curriculum allocates 8 hours and 40 minutes (that is, 13 lessons) a week to its primary language (Khmer) in grades 1 to 3 (Cambodia's intended instruction time allocation to primary language in grades 1 to 3 is one of the highest in the region) but thereafter decreases significantly to 5 hours and 20 minutes (that is, 8 lessons) in grades 5 and 6; see Figure 22. Similar significant declines are found in the curricula of Lao PDR, Thailand, and Viet Nam, whereas in the remaining countries, the time allocated to primary language is more or less the same across grades or even increases somewhat (in the Philippines).

Figure 22: Absolute intended instruction time allocation to primary language (hours per week), by grade

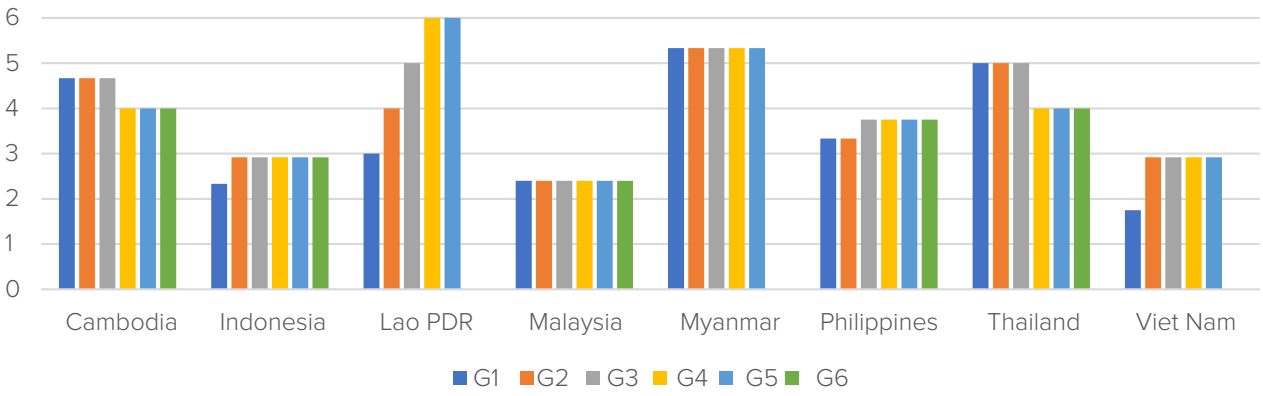


Source: World Bank staff calculations based on data collected by education experts across ASEAN member states.

Note: Data is included to illustrate regional variations and should not be treated as a comprehensive and accurate description of instruction time in individual countries.

95. **Unlike in Cambodia's primary school curriculum, time allocated to math in ASEAN countries is typically equal across grades or increases somewhat after grade 1.** In Cambodia's curriculum, intended instruction time allocated to math decreases somewhat after grade 3, reducing the number of lessons per week from 7 to 6 (from 4 hours and 40 minutes to just 4 hours). Only in Thailand's curriculum, a similar reduction can be found; see Figure 23.

Figure 23: Absolute intended instruction time allocation to math (hours per week), by grade



Source: World Bank staff calculations based on data collected by education experts across ASEAN member states.

Note: Data is included to illustrate regional variations and should not be treated as a comprehensive and accurate description of instruction time in individual countries.

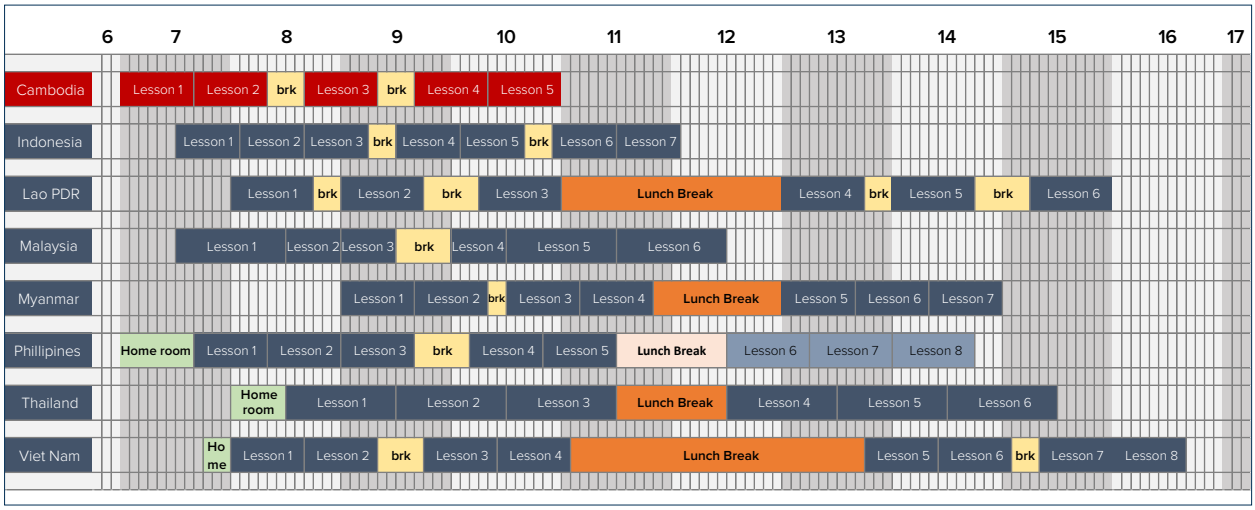
4.3 Typical School Day Schedules

96. **Data was collected across the eight ASEAN member states describing a schedule of *'a typical school day of a typical primary school student'.*** Education experts and researchers across the ASEAN countries were asked to indicate the start and end times of lessons on a typical school day. The main aim of this analysis is to identify if primary schools typically (that is, as commonly practiced) deviate from the prescribed curriculum instructions. In the case of Cambodia, a typical primary school day schedule is identical to the prescribed norm (five lessons per day). However, in Malaysia, Thailand, and Viet Nam, typical school days are significantly longer and include more lessons than prescribed by the curriculum (as the mandatory minimum). As a result, instruction time is increased significantly.

97. **In Lao PDR, Myanmar, Thailand, and Viet Nam, a typical school day covers both the morning and afternoon, as students continue class after the lunch break (referred to as a 'full-day configuration');** see Figure 24. However, similar to a typical school day in Cambodia, primary school students in Indonesia and Malaysia finish their lessons in the morning before lunch (or in the afternoon in case there is an additional shift in the same school). Primary school students in lower grades in the Philippines finish their lessons before lunch, but for higher grades, lessons continue after lunch.

98. **Typical day schedules across ASEAN countries also vary considerably in terms of breaks included in the schedules and the share of the 'school day' devoted to instruction.** A typical day in Lao PDR includes breaks between all lessons (four shorter breaks in addition to the lunch break), whereas in Thailand there are *no* breaks except for a 1-hour lunch break. Several ASEAN countries also include homeroom sessions, where students come together daily with the same teacher, before dispersing to other classes. Some ASEAN countries have a formalized time allocation for singing the national anthem and/or raising the flag ceremonies.

Figure 24: A 'typical school day' schedule for a 'typical primary student' illustrated for ASEAN member states

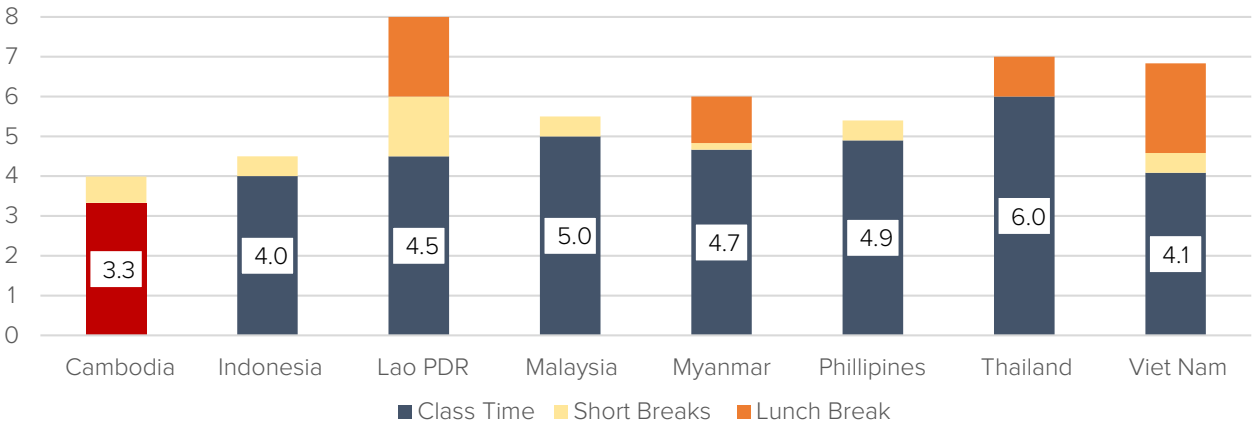


Source: World Bank staff calculations based on data collected by education experts across ASEAN member states.

Note: Data is included to illustrate regional variations and should not be treated as a comprehensive and accurate description of instruction time in individual countries.

99. In countries where the typical school-day has a 'full-day configuration' that crosses the 'lunch break barrier', gains in instruction time vary but are often modest. For example, in Lao PDR, where a typical school day starts at 8 a.m. and ends at 4 p.m., there are only 4.5 hours of instruction time in an 8-hour period; see Figure 25. As result, its instruction time (on a typical day) is lower than in Malaysia (5 hours) and only marginally higher than in Indonesia—both countries where a typical school day finishes before lunch; see Figure 25.

Figure 25: A typical primary school day schedule, disaggregated by class time, short breaks, and lunch breaks



Source: World Bank staff calculations based on data collected by education experts across ASEAN member states.

Note: Data is included to illustrate regional variations and should not be treated as a comprehensive and accurate description of instruction time in individual countries.

4.4 Discussion

100. First, Cambodia's intended instruction time for primary education is lower than the average time across the Southeast Asian region, both in weekly and annual hours. Especially when considering that Vietnamese primary schools are typically providing more instruction time than the prescribed mandatory minimum, Cambodia's intended instruction time is one of the shortest in the region. However, the overall relation between (minimum mandatory) intended instruction

time and student performance is weak across the ASEAN member states, echoing some of the main findings from the academic literature; see Section 2. ASEAN countries with more than 900 intended instruction hours per year (for example, Lao PDR, the Philippines) do not perform well compared to their peers, and conversely, countries with high primary education PISA scores (for example, Viet Nam, Malaysia) do not have significantly longer annual intended instruction hours.

101. **Second, switching to a full-day configuration does not automatically result in considerable gains in intended instruction time, as the variation in school day efficiency across ASEAN countries suggests.** Several ASEAN countries with a full-day configuration (lessons both in the morning and afternoon for the same students) did not gain significant additional intended instruction time. The most notable example is Lao PDR, where during a 'typical' 8-hour day, only 4.5 hours are allocated to class time. However, in Thailand, the typical school-day is an hour shorter, but students enjoy 6 hours of instruction time. This variation in instruction time suggests that *efficiency* is an important factor to consider in full-day configurations.

102. **Conversely, the Malaysian school day schedule suggests significant intended instruction time can be created before the lunch break.** Malaysia's curriculum provides one of the highest amounts of intended instruction time in the region despite not crossing the 'lunch break barrier'. This has important cost implications, as a Malaysian style schedule does not require additional classrooms in double-shift schools and could potentially be achieved with the existing HR available to the MoEYS. The Malaysian example could thus be considered 'the low-cost option for increasing instruction time'.

103. **Third, increasing instruction time in core subjects might not yield significant results in terms of student learning outcomes, if moderating factors (for example, teaching quality) are not addressed.** The relative share (percentage) allocated to core subjects (language, math) in Cambodia's curriculum is the largest in the region and, in absolute terms (hours), is one of the highest in the region as already discussed in subsection 4.4. This finding questions the assumption that relatively poor scores on PISA tests are the result of limited intended instruction time in Cambodia. Cambodia's primary education time allocation to math lessons (4.3 hours in the national curriculum and 5.2 hours based on teacher self-reported data) is *not lower* than the ASEAN average (3.8 hours) and is thus unlikely the primary factor impeding student learning outcomes. Instead, as the literature review in Section 2 suggests, moderating factors (for example, the quality of teaching and how the math instruction time is used) might reduce the effectiveness of the time allocated to math, and addressing these moderating factors should be included in any strategy aiming to improve student learning outcomes.

104. **Fourth, Cambodia's curriculum and typical school day schedule are relatively uniform, compared to its regional peers, and diversification could be considered to optimize cost-efficiency and its potential to affect learning outcomes.** In Cambodia, primary school students go to school *at the same time, for the same number of lessons, every day, across all grades, and all primary schools, everywhere in the country.* Conversely, some strong performing countries (Viet Nam and Malaysia) have limited *mandatory* instruction time, to allow for double-shift schools. However, they offer considerable additional/voluntary hours in schools where this is feasible—in the case of Viet Nam against an out-of-pocket (OOP) fee (informally recognized as subsidized day care).

105. **Finally, the ASEAN primary education curriculum comparison is primarily helpful in illustrating the variation of practices among regional peers and potential options for reform.** However, data, calculations, and conclusions should be treated with caution, as curricula practices are pluriform and difficult to demarcate and quantify. Box 2 describes models derived from the analysis of ASEAN instruction time and school day schedules that will be used in the following section to discuss policy options for increasing instruction time.

Box 2: Four lesson schedule models

Based on the findings in this section, four example 'models' are created that will serve to further explore policy options for increasing instruction time in Cambodia's primary education.

The 'Malaysian Model': Maximize instruction time in a split-day configuration.

- School day typically finishes before the lunch break (starts at 7.00 a.m. and ends around 12.30 p.m. or 1.00 p.m.).
- Minimum mandatory curriculum requirement is 3.9 hours of instruction time per day, 19.4 hours per week (18.8 for lower grades [1–3] and 20 for higher grades [4–6]), enabling double-shift schools.
- School days typically last 5 hours (lower grades) to 5.5 hours (higher grades), with one 30-minute break between lessons, around 10 a.m. Students can eat during the 30-minute break or after school.
- Typical day includes around 4.8 hours of instruction time. Schools seem to have considerable discretion over how to use extra time; single-shift schools may use the afternoon for tutoring, remedial, and extracurricular activities.

The 'Thai Model': Maximize efficiency in a full-day configuration.

- School day typically starts at 8 a.m. and lasts for 7.5 hours (including half an hour homeroom).
- Longest duration of lessons (60 minutes). Lessons are symmetrically distributed, with three lessons before and three lessons after lunch.
- The Thai model is the only schedule across the ASEAN examples that do not include short breaks (besides the lunch break), *and* the lunch break is relatively short. Students reportedly stay in their classrooms, while teachers change classrooms.
- Considered the most 'efficient' schedule in terms of getting the most instruction time out of the typical school day duration.

The 'Philippine Model': Variation across grades, lessons, and days.

- Intended instruction time totals 24 hours and 20 minutes—but the first two grades have only 16 hours and 40 minutes, whereas in the higher grades, it almost doubles to 30 hours per week.
- Lower grades (grades 1–2) finish their lessons before lunch, whereas higher grades (grades 3–6) continue after lunch—with more variable implications for the need of classrooms.
- The duration of lessons also varies across grades from 40 minutes in lower grades (grades 1–2) to 45 minutes in higher grades (grades 3–6).

The 'Vietnamese Model': Long school days with considerable autonomy for schools.

- Shortest minimum mandatory curriculum requirements, but (one of) the longest typical school days.
- Mandatory curriculum can be finished in the morning, but schools are instructed to keep children in the afternoon—widely perceived to be a measure to facilitate (female) labor participation.
- Schools have considerable discretion over afternoon content.

Source: Interviews with education experts across ASEAN member states (2024).

5 Increasing Instruction Time - Policy Options

106. **This section discusses different methods and policy options for increasing instruction time in Cambodia's primary schools** and their associated costs and benefits. Thereafter, it describes some of the existing initiatives in Cambodia to increase instruction time in primary schools and discusses their implications for policy development.

5.1 Increasing Instruction Time - Policy Options

107. **There are overall three potential methods to increase instruction time in Cambodia's primary education curriculum:** (a) increasing instruction time within the existing allocated time limits; (b) increasing lesson days within a week, month, or year; and (c) increasing instruction time within a day. These methods are described in more detail in this subsection.

108. **First, instruction time can be increased within the existing allotments (that is, within the limits of the curriculum) by readjusting subjects within the curriculum or by reducing time loss through absenteeism, tardiness, and (un)official school closures; see subsection 3.3.** The MoEYS could adjust the current allocation of time (that is, the number of lessons) to subjects within the curriculum. For example, it could increase the overall time allocated to core subjects (that is, Khmer and/or math), aiming to strengthen student learning outcomes in those subjects. Although this might be an option in other countries (with other curricula), this option is of limited utility for Cambodia as its (primary education) national curriculum component already assigns 80 percent of lessons to core subjects (in grades 1 to 3), and its allocation to core subjects is already very high in both absolute terms and as share of the intended instruction time; see subsection 3.1.

109. **However, there is potential to increase *actual* instruction time in Cambodia at fairly low costs (or no cost at all) by addressing teacher absenteeism as well as unofficial school closures.** Quality data on teacher absenteeism is scarce, as discussed in subsection 3.3; however, the existing data and studies suggest that teacher absenteeism significantly reduces instruction time and is particularly high around official holidays. When holidays fall in the middle of the week, teachers and students are often absent for the entire week, creating de facto unofficial holidays. The MoEYS could reduce time loss (that is, increase actual instruction time) by addressing absenteeism more effectively and increasing compliance to mandatory working hours.

110. **Moreover, the MoEYS could reduce instruction time loss by clarifying (and strictly enforcing) the school year calendar** (identifying official school closures and monitoring reopening) **as well as limiting additional official school closures due to political events that are not strictly necessary** (for example, elections, regional, or local political events). Although the lack of quality data on time loss prevents an accurate estimate of potential gains, a rough estimate (based on 2012 fieldwork) suggests that actual instruction time could be increased by around 10 percent, based on a combination of reduced school closures and some reduction in teacher absenteeism.[51]

111. **Second, instruction time can be increased by adding more number of lesson days per week, month, or year.** More school days per year allow for more instruction time hours per year, and adding 5 percent more school days would (if instruction time is evenly distributed) result in 5 percent more instruction time. However, in the case of Cambodia's primary education curriculum, a regular school week already has six lesson days, compared to five typical lesson days per week in the region and globally.

[51] See NGO Education Partnership. 2015. *Teaching Hours in Primary Education Schools in Cambodia.* Additional official school closures resulted in 8 percent time loss in 2012, whereas teacher absenteeism (including unofficial school closures) accounted for another 10.5 percent time loss.

112. **Instead, for increasing instruction time in Cambodia through this method, the primary potential comes from reducing the number of official holidays and increasing the number of lesson *weeks* per year.** Currently, the MoEYS mandates 38 lessons weeks per year (according the 2005–2009 curriculum policy), which is also the average found across the ASEAN countries reviewed for this study (see Section 4) as well as for OECD member states.[52] However, lesson weeks per year across ASEAN countries typically fall within a '36 weeks to 40 weeks' bandwidth, and in Malaysia, the Philippines, and Thailand, primary education is delivered 40 weeks per year. Similarly, many OECD member countries, including Australia, Colombia, Croatia, and the Netherlands, have school years with at least 40 weeks.[53] **The MoEYS could consider increasing the number of weeks to 40, which would allow for an additional 5 percent in intended instruction time.** Moreover, the MoEYS could also restrict or reduce the number of school closures due to official holidays in a year, reducing loss of actual instruction time.

113. **Third, instruction time can be increased within a school day by adding lessons or instruction time to the school day schedule.** This method is typically associated with the policy dialogue on the 'full-day curriculum' or 'full-day schooling', and, as discussed in subsection 5.2, several schools have already added lessons to their day schedules. However, this method can be applied in varying ways and the following subsection describes four options in more detail.

114. **Importantly, these methods are not mutually exclusive, and the MoEYS should consider applying all three to increase actual instruction time, but they vary considerably in terms of cost implications.** The first two methods can be implemented at low cost (or no cost at all), whereas the latter method (increasing time within the day) likely requires investments and additional recurrent spending (that is, requiring additional facilities and teaching staff). Similarly, the within-day options described in the following subsection are not mutually exclusive. Considering fiscal restrictions to the expansion of education spending, varying household income levels (and the capacity of communities to contribute to finance education OOP), and the typically decades-long transition to full-day schooling, as discussed in subsection 2.3, the MoEYS could decide to apply different option across parts of the country and over time.

5.2 Increasing Instruction Time - Within-day Options

115. **In the Cambodian case, there are different options for adding instruction time within the primary school day schedule.** Lessons can be added while maintaining a *'split-day configuration',* that is, adding lessons before the lunch break while limiting the schedule to the morning (so that a second afternoon shift is still possible), or they can be added after the lunch break, shifting to a *'full-day configuration'.* Moreover, lessons can be added to the schedule equally for all grades (grade 1 to 6) and all lesson days (Monday to Saturday) or only for selected grades or days. Additional time can be used and financed regularly or irregularly (for example, additional time can be used for self-study or financed by parents rather than the MoEYS). This subsection describes these options in more detail.

Split-day Configurations

116. ***Within-day Option 1:* Increase instruction time in a *split-day configuration*—'the Malaysian model'—maximizing lessons before the lunch break**. In Malaysia, primary school students go to school for 5 to 5.5 hours before lunch (on a typical school day), of which 4.75 hours (that is, 4 hours and 45 minutes) are used for instruction time. The existing schedule and two variations are considered here.

[52] OECD. 2023. *Education at a Glance 2023.* Paris: OECD, p. 359.

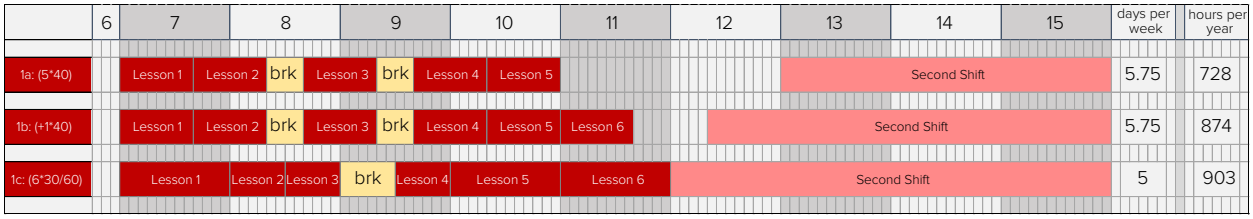
[53] OECD. 2024. "How Is the School Year Organised in OECD Countries?" *Education Indicators in Focus* July 2024 #86, OECD, Paris, p. 2.

1a. The existing schedule of primary schools in Cambodia is an example of a split-day configuration, five lessons of 40 minutes each for 5.75 day per week, and 38 weeks per year, resulting in 728 instruction hours per year.

1b. The MoEYS could consider **adding one lesson to the regular day schedule** (for example, from 11.00 a.m. to 11.40 a.m.) every weekday (see Figure 26) in the existing 5.75 days per week schedule.54 This would add 20 percent of instruction time per day and annually increase instruction time to 874 hours.

1c. Or the MoEYS could **replicate the Malaysian schedule** with 4.75 instruction hours (through 30- and 60-minute lessons) per day, 5 days a week, starting at 7 a.m. and finishing at 12.00 p.m., increasing instruction time by 24 percent per day, to 903 hours annually (in a 5 days per week configuration).

Figure 26: Options for split-day lesson schedule configurations on a timeline and converted to annual hours per year illustrated



117. This is the lowest-cost option and likely the most cost-efficient option to increase instruction time, but the amount of time that can be added is limited. This option would *not* require an additional investment in infrastructure (that is, additional classrooms) because the split-day configuration is maintained, and thus schools currently running a double shift can continue to implement the curriculum without additional facilities. Moreover, the recurrent costs of additional teaching hours are limited, as the schedule becomes more efficient in using its time for instruction. Because teachers are not prevented from earning income through secondary jobs in this configuration, it would also likely be easier to enforce. Finally, the additional recurrent costs could be phased out over time (see section 6) and/or could be enforced on a new teacher cohort to be recruited in the future.

Table 6: Options for split-day lesson schedule configurations and calculations for instruction time per week and per year

Split-day Configuration							
	Lessons per day	**Minutes per lesson**	**Days per week**	**Hours per week**	**Weeks per year**	**Hours per year**	**Instruction time gain**
1a. Current day schedule	5	40	5.75	19.17	38	**728**	—
1b. Add 1 lesson (40 minutes)	6	40	5.75	23.00	38	**874**	**+ 20%**
1c. Malaysian model	6	30 or 60	5.00	23.75	38	**903**	**+ 24%**

54 The MoEYS could even consider adding two lessons of 40 minutes each (and reduce breaktime).

118. **However, this option is limited in the amount of time that can be added and restricted by local norms regarding the sanctity of the lunch break and its duration.** Moreover, it does not include the additional social and economic impacts associated with full-day schooling, for example, female workforce participation and reduced risk-taking behavior of students.

Full-day Configurations

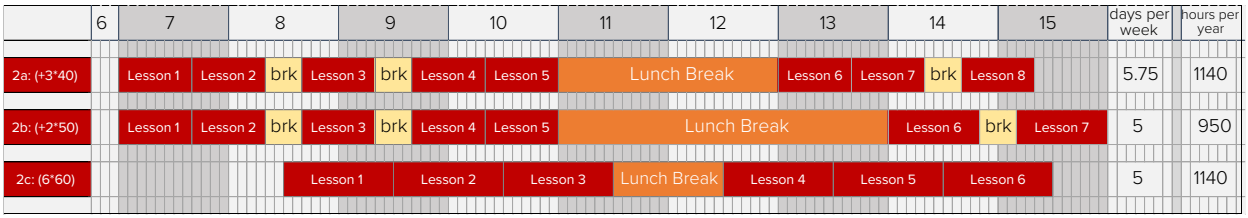
119. ***Within-day Option 2:* Increase instruction time in a *full-day configuration*—'the Thai model'—adding one or more lessons after the lunch break**. In Thailand, primary school students go to school for 7.5 hours (on a typical school day), before and after lunch, of which 6 hours are used for instruction time, 30 minutes for homeroom, and 1 hour for lunch break. However, in Lao PDR, students go to school for 8 hours (on a typical school day), of which only 4.5 hours are used for instruction time. These examples show that full-day configurations do not automatically add substantial instruction time, and some schedules are more efficient than others. Three variations are considered here.

2a The MoEYS could consider adding three 40-minute lessons to the regular schedule but after the lunch break (for example, from 1.00 p.m. till 3.20 p.m.) for 5 days per week (see Figure 27), similar to what was introduced in *Akhea Mahasei* primary school (School 1); see Box 3. On the sixth day, this schedule has lessons only in the morning. This would add 57 percent of instruction time per day and annually increase instruction time to 1,140 hours (in a 6 days per week configuration).

2b. The MoEYS could consider adding two 50-minute lessons to the regular schedule but after the lunch break (for example, from 2.00 p.m. till 4.00 p.m.) every weekday, and reducing the number of school days to 5 per week; see Figure 27. This schedule was introduced in *Kiri Sovanvong* primary school (School 2), discussed in subsection 5.3. This would add 30 percent of instruction time per day and annually increase instruction time to 950 hours (in a 5 days per week configuration).

2c. The MoEYS could also replicate the Thai schedule, symmetrically distributing six instructional hours (60 minutes each) before and after lunch, which (in a 5-day configuration) would result in 1,140 instruction hours annually.

Figure 27: Options for full-day lesson schedule configurations on a timeline and converted to annual hours per year illustrated



120. **This is the highest-cost option and likely a medium to low cost-efficiency option to increase instruction time, depending on the schedule of lessons added in the afternoon.** Implementation of this option requires the largest initial investment in terms of new classrooms and school buildings. Schools currently running two shifts will require additional facilities as each class will require its own dedicated classroom. Moreover, this option limits teachers' ability to earn additional income through secondary jobs and significantly lengthens the overall duration of the workday, likely requiring a significant pay increase to be implemented and enforced.

Table 7: Options for full-day lesson schedule configurations and calculations for instruction time per week and per year.

Full-day Configuration	Lessons per day	Minutes per lesson	Days per week	Hours per week	Weeks per year	Hours per year	Instruction time gain
2a. Add 3 afternoon lessons (40 minutes) on 5 days only	8	40	5.75	29.17	38	**1,108**	**+ 52%**
2b. Add 2 afternoon lesson (50 minutes) - but reduce to 5 days	7	40 or 50	5.00	25.00	38	**950**	**+ 30%**
2c. Thai model	6	60	5.00	30.00	38	**1,140**	**+ 57%**

Varied-day/Grade and Irregular Afternoon Configurations

121. ***Within-day Option 3:*** **Increase instruction time in a varied *lesson/day/grade configuration*—'the Philippine model'—adding lessons after the lunch break for some grades only, some weekdays only, or for different grades on different weekdays.** In the Philippines, primary students in higher grades (5 and 6) go to school in the morning and the afternoon (that is, full-day configuration), whereas students in lower grades go to school only in the morning (split-day configuration). In theory, there is an endless number of variations possible within this option. The schedule could provide a full-day configuration for each grade on a different day or a full-day configuration every day for specific grades only.

122. **This is the medium-cost option (depending on the variations in implementation and likely a medium cost-efficiency option to increase instruction time**. A key benefit of this option is that it allows for flexibility for both additional classroom and teacher needs. If grades 3 to 6 each have one full day of lessons per week, it requires only one additional classroom (and teacher), which could be used by different classes on different days. Variations across days and grades allow for more efficient use of the existing infrastructure and also enable teachers to continue working one part of the day (and earn additional income through secondary jobs), making it easier to be implemented and enforced.

123. ***Within-day Option 4:*** **Increase instruction time in an *irregular afternoon configuration*—'the Vietnamese model'—through devolution and OOP-financed lessons, voluntary lessons, self-study hours, or extracurricular lessons.** In Viet Nam, the mandatory primary education curriculum is relatively short and can be provided in the morning only. However, students typically go to school both mornings and afternoons and have one of the longest typical school days among ASEAN member states; see subsection 4.3. Provinces, districts, and even schools have considerable autonomy in determining how they want to use the remaining (afternoon) time. Moreover, although education is free, parents in urban and more affluent areas pay for services and amenities in public schools (for example, lunch and air conditioning), and fees can vary from one school to the next. These fees allow schools to establish funds that enable them to also invest in the curriculum (for example, by paying foreign language or computer science teachers). Some schools are (indirectly) paid by parents to provide additional lessons based on the parents' preferences.

124. **These final options consider that the policy options for increasing instruction time might also include variations per day/grade or in financing, delegated autonomy, and the use of the additional time.** For example, schools could add afternoon lessons financed by parents (rather than the MoEYS budget) or by a combination of public funds and parent contributions. Some of the

existing initiatives to increase instruction time in primary schools in Cambodia that have already introduced a full-day schedule (see subsection 5.3) have implemented afternoon programs financed by parents' OOP contributions (see Box 3 for examples), whereas others have received funding from both MoEYS and parent contributions. Besides alternative financing methods, the MoEYS could also consider allocating time in the afternoons differently, for example, by adding self-study hours to the curriculum, by creating more focused remedial teaching hours (unlike the current Thursday lessons which are attended by almost all students), or by allowing schools to decide themselves how to use the extra time. As there are too many undetermined elements in these policy options (the need for additional infrastructure and HR depends on the specific decisions within these options), the costs for implementation will not be estimated in subsection 5.4.

5.3 Increasing Instruction Time - Existing Initiatives

125. **Some public primary schools in Cambodia have already increased instruction time for their students, with the approval, endorsement, and (to varying degrees) support of the MoEYS.** For this study, three public primary schools, that have already increased instruction time for their students, were visited in April 2024. These schools shared many similarities in terms of how they increased instruction time and what they did with the additional time. However, they also varied considerably in terms of the organizational structure and financing of the additional time, including the extent to which they received support from the MoEYS. Box 3 describes these three schools in more detail. The below subsection focuses on analyzing the similarities, differences, and implications for informing the policy development on increasing instruction time.

Similarities across 'Full-day' Initiatives

126. **An important similarity across the primary schools that have increased instruction time in Cambodia is that they all opted to introduce a *'full-day configuration'* (adding afternoon lessons after the lunch break *every day*).**[55] Schools typically retain the existing morning schedule (that is, five lessons of 40 minutes between 7 a.m. and 11 a.m., as prescribed by the MoEYS) and incorporate additional lessons in the afternoon (5 days a week), either three additional 40-minute lessons or two additional 50-minute lessons. None of the schools visited mentioned measures to increase the number of school days in the year (for example ,by reducing holidays or school closures) or measures to increase actual instruction time within the existing intended curriculum time (for example, by reducing teacher absenteeism and tardiness or restructuring the curriculum).

127. **Moreover, all schools provide additional pay to existing teachers (and sometimes new contract teachers) financed primarily by parents' OOP spending** or at least planning to finance additional pay through OOP long term. None of the schools required teachers to stay longer at school without additional pay (although civil servants are officially expected to work 40 hours a week), and schools typically recruited foreign language and information and communication technology (ICT) teachers externally (contract teachers). These additional salaries are typically financed by parent OOP contributions, although the new generation schools (NGS) visited for this study (see *Kiri Sovanvong* primary school, School 2) still required MoEYS funding for additional salary payments.

128. **All schools that introduced initiatives to increase instruction time (and visited for this study) have strong reputations as 'good schools' and students from high-income households, previously enrolled in private education and/or tutoring, and they typically roll out the full-day curriculum progressively across classes.** All schools visited for this study appeared to have outstanding reputations for providing high-quality education and producing high-caliber grade 6

[55] At least those that were visited for this study. NGS also typically add lessons after the lunch break.

graduates, often certified by winning national awards. A key element described by all principals was the parents' trust, which required transparent communication by the schools' leadership. However, the schools' high performance (presumably) is also critical for this trust. Moreover, most students enrolled in the schools come from high-income households, with parents who are able to afford KHR 240,000–600,000 (US$60–150) annual contribution fee per student. The trust of high-income households is needed to mobilize the investment required to start additional classes in the afternoon. Most parents had their children enrolled in private education (either full enrollment of private tutoring/afternoon programs) before the rollout of the full-day curriculum and appear to welcome the initiative (not least because it provides value for money). Schools typically start with a subsection of their classes (that is, not all their classes) where they are able to concentrate students of parents who are willing to contribute. Thereafter, they progressively roll out the curriculum across additional classes once more parents are convinced by the success of the initial effort.

129. **None of the schools' initiatives appear to have been restricted by government regulations, and none of the schools have robustly tested the impact of their initiatives.** None of the schools mentioned government regulations as an obstacle to their initiatives, and the MoEYS seems to have typically played a supportive role, authorizing initiatives without strict application of existing law and regulations. For example, civil servant teachers at these schools are paid additional incentives for teaching lessons during the afternoon, even though they are expected to work 40 hours per week (that is, including the afternoon) and are legally not allowed to be paid for work outside of their civil service appointment. The schools' leadership also did not mention bureaucratic struggles for establishing equity funds and the associated bank accounts and legal entities, suggesting an overall friendly regulatory approach by government authorities. Moreover, principals and teachers all believed that the initiatives had improved student performance (and reduced student repetition), but none of them have established a robust (that is, baseline/endline) evaluation to assess its impact—and interschool comparison is problematic due to the high performance of these schools before introducing the initiatives.

Differences across 'Full-day' Initiatives

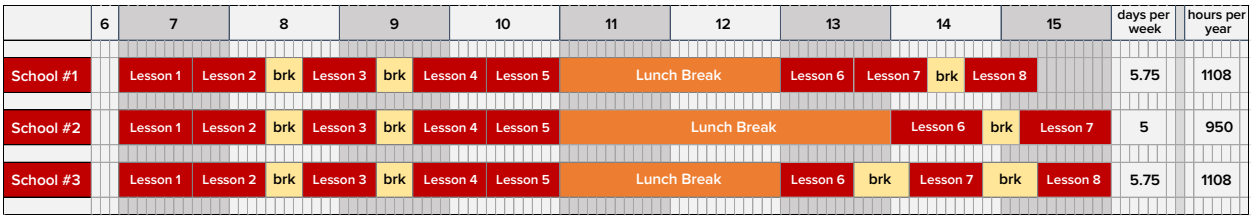
130. **A key difference across schools with increased instruction time initiatives is the extent to which they have received support from the MoEYS.** One school manages to organize and finance afternoon classes without any external financing, instead relying exclusively on parent contributions. However, a second school received considerable support from the MoEYS (around KHR 430,000 [US$108] per student per year for the first four years). In addition, this school has been allocated a disproportionate number of 'regular' teachers (which could be considered a hidden cost for the MoEYS). This second school is struggling to migrate to a parent contribution financed modality due to high costs. The school introduced higher 'incentives' for teachers than the former, and also introduced them for all staff, including non-teaching staff. A third school finances extra salaries through parent contributions but was assigned classrooms for a full day in a school that normally runs two shifts (thus creating a hidden MoEYS cost for classroom demand).

131. **The three schools visited for this study also vary considerably in terms of the financing and implementation structure of the additional instruction time**. One school has handled everything 'in-house', where the school's own leadership and management committee are collecting parent contributions and managing and spending their equity fund without external support or involvement. In a second school, the afternoon classes are financed and organized through a separate nonprofit and nongovernment entity. Regular morning lessons are managed and implemented by the public school, but afternoon classes by this nonprofit organization, which in turn has procured the services of a for-profit firm that provides textbook and learning materials as

well as teachers (for example, for foreign languages). In a third school, an NGO provided technical, organizational, and financial support to the school introducing additional instruction time and acted as a go-between for the school and the MoEYS.

132. **Finally, there is considerable variation in the amount of instruction time gained and spending efficiency (either public spending or OOP).** Some schools have halted Saturday morning lessons since the full-day curriculum was introduced. As a result, instruction time and lessons can vary across full-day curriculum schools from 950 hours per year or 25 hours in 35 lessons per week (that is, five mornings with five regular 40-minute lessons + 5 afternoons with two 50-minute lessons = 35) to 1,108 hours per year or 29.2 hours in 45 lessons per week (that is, six mornings with regular 40-minute lessons + 5 afternoons with three 40-minute lessons); see Figure 28. The difference compared to the baseline of 19.2 hours in 30 lessons (6 days of five 40-minute lessons in the standard curriculum including Saturdays) is either an additional 30 percent or 52 percent. Importantly, one school visited for this study introduced a 25-hour curriculum (30 percent increase) at a higher cost than another school that implemented a 30-hour curriculum (52 percent increase); see subsection 5.4 for cost estimates.

Figure 28: Existing 'full-day' initiatives on a timeline and converted to annual hours per year illustrated



Box 3: Three primary schools with 'full-day' initiatives

For this study, three primary schools that had already introduced a full-day lesson schedule configuration were visited. These schools and their initiatives to adjust the schedule and increase instruction time are described hereunder in more details.

***School 1: Akhea Mahasei* primary school in Oudong Maechey City, Kampong Speu Province**

***Akhea Mahasei* primary school is 1 out of 13 schools that are part of the 'NGS' reform initiative.**[56] Although increasing instruction time, by switching to a 'full-day' curriculum, is central to the NGS initiative, it includes a range of investments and reforms such as renovating classrooms and libraries, equipping laboratories, improving school-based management, and implementing twenty-first century pedagogical ecosystem for improved learning outcomes. NGS receive considerable financial support from the MoEYS in the first three years. Government financial support (as well as other funding) is transferred to an 'equity fund', covering the additional spending on 'incentives' for existing teachers (to work more hours per week), salaries for new contract teacher, and investments to upgrade infrastructure and equipment. After three years, NGS are expected to finance the additional costs themselves primarily through parent contributions. Furthermore, NGS receive technical support from a local NGO, Kampuchea Action to Promote Education (KAPE), that receives an annual budget of approximately US$1.8 million from the government. KAPE assists in managing the operation of NGS, including infrastructure development, financial management, learning contents, teacher recruitment and capacity development, and community engagement

[56] The NGS was rolled out to 13 schools (out of which four are primary schools). The NGS initiative was launched in 2015 (although a pilot already existing in 2011).

There are no strict guidelines on what NGS should implement or how they should increase instruction time. The MoEYS and KAPE have defined a list of 24 criteria that schools need to meet for NGS accreditation. However, once schools are NGS accredited, they have considerable autonomy in deciding on how much additional time they want to add to the curriculum, how they want to use it (that is, what subjects), how to staff additional instruction time, and how to finance it (for example, some NGS are open 5 days a week and others 6). However, a minimum benchmark is prescribed: NGS are expected to provide at least 34 lessons per week.

Classes that switched to the extended full-day curriculum at *Akkak Moheasy* primary school receive 10 additional classes per week of 50 minutes each. Classes at the school are taught, like most primary school classes in Cambodia, Monday to Saturday from 7 a.m. till 11 a.m. The additional NGS curriculum extension consists of two additional 50-minute lessons taught Monday to Friday between 2 p.m. and 4 p.m. These additional lessons were introduced in phases—with grade 1 and 2 classes extending to the full-day curriculum first. According to the school management, the extra time is used for core subjects (Khmer and math) as well as foreign languages and ICT. Most of the additional instruction time is taught by existing civil servant teachers, providing additional lessons in the afternoon. However, for foreign languages and ICT, the school has hired contract teachers, paid through the 'equity fund'.

***Akhea Mahasei* primary school spends around KHR 40 million (US$10,000) per month on 'incentives' to existing civil servant and contract teachers, who are paid around KHR 700,000 (US$175) and KHR 500,000 (US$125) respectively per month,** in addition to their regular salary, for teaching extra lessons in the afternoon. Both teachers and non-teaching staff receive additional allowances. Teachers were initially not happy to join the program, as 'they can earn more money doing something else in the afternoon', according to the school's management. Besides additional spending on salaries for extra contract teachers and incentives for additional working hours, the school appears to have more 'regular' staff per class than a typical primary school: 36 classes and 53 teaching full-time equivalents (FTEs) (45 civil servant teachers and eight contract teachers).

The MoEYS' initial financial support of three years was extended by a fourth year ('due to COVID'), but the school continues to receive MoEYS support as parents' contributions are not sufficient to finance the additional staffing costs. According to the school's management, the MoEYS contribution in preceding years was around KHR 500 million (US$125,000). In 2024, support declined to KHR 300 million (US$75,000). The school also receives a school operational fund (almost KHR 20 million [US$5,000]) from the MoEYS, and the management mentioned additional MoEYS support and Provincial Education Office (PEO) relocations of staff to facilitate the school.[57] Furthermore, it receives 'external support' from charities.

Parents' contributions to finance the full-day curriculum vary. Parents with one enrolled student pay KHR 600,000 (US$150) per year, two enrolled students require a KHR 900,000 (US$225) contribution, three enrolled students KHR 1,200,000 (US$300), and parents who cannot afford the contribution (identified based on ID poor rating 1 and 2) are exempted. In the 2023–2024 academic year, for example, 13 percent of the students in *Akhea Mahasei* primary school, attended the class at no cost. On the other hand, many parents had their children enrolled in English afternoon private classes typically costing around KHR 120,000 (US$30) per month, and thus are happy with decreased OOP expenditures.

School 2: *Kiri Sovanvong* primary school in Rolea Bier District, Kampong Chhnang Province

***Kiri Sovanvong* primary school is an example of a primary school that increased instruction time for most of its classes fully financed by parent contribution and without MoEYS financial support**. According to the school's principal, parents requested the school in 2017 to increase the

[57] The school management mentioned that the PEO had relocated staff to the school to facilitate the implementation of the 'full-day curriculum'. However, additional staff (or more staff than the norm or average) could also be considered an additional form of financial support to this particular school.

school day to a full day. The SMC followed up on this request by preparing a plan, and the school management requested the MoEYS for approval to switch to a full-day curriculum. In 2018–2019, the school introduced its first full-day curriculum in seven classes, and in April 2024, 17 out of 19 classes were applying a full-day curriculum.

The school has increased from 30 to 45 lessons per week and used its additional instruction time for extra lessons on core subjects (Khmer and math) and introduced classes on foreign language, ICT, art, and LLSP. Like most primary school classes in Cambodia, classes at the school are taught Monday to Saturday from 7 a.m. till 11 a.m.; the additional classes are run in the afternoons of the same days from 2 p.m. to 4.30 p.m. The school management and teachers discussed and decided how the extra time in the afternoon class is used. A huge proportion of the additional time is dedicated to core subjects with five to eight extra Khmer lessons and six to nine extra math lessons added per week, depending on the grade level. All the extra instruction is delivered by current civil servant teachers, who offer additional lessons in the afternoon.

The school's equity fund is fully financed by parental contributions and primarily used to pay 'incentives' to teachers for teaching additional lessons each week. Parents are expected to contribute KHR 20,000 (US$5) per month, but contributions can vary for poor families and families with multiple children enrolled in full-day classes. Poor families (ID poor 1 and 2) are exempted from paying. Only 30 out of 620 students enrolled in full-day classes are unable to pay the full fee. The school initially proposed a KHR 30,000 (US$7.5) monthly contribution, but parents indicated they were not willing to pay this amount. Many parents used to have their children enrolled in afternoon private classes and thus reduced their OOP expenditures. However, some parents believe the school should be paid by the government and that parents should not have to spend OOP.

About 80 percent of the equity fund is spent on incentives for teachers, the remaining 20 percent is spent on operations (13 percent), school development (5 percent), and other expenditures (2 percent), according to the school's management. The 17 teachers providing extra lessons are paid KHR 480,000 (US$120) for 10 months of the year. Non-teaching staff (and teachers who are not teaching extra) do not receive incentives. Parents believe their contributions are primarily spent on education and indicate they are more motivated by a desire for better education and less by the convenience of child day care.

The school management emphasizes the importance of parents' trust in the school and good communication for establishing the OOP payments for extra instruction time. The *Kiri Sovanvong* school has an exceptionally good reputation. It has won multiple awards, including the outstanding principal award (2017). the clean school award (2018–2019), an outstanding teacher award (2018–2019), and a model school award (2023) from the MCS. The school has been visited twice by the senior leadership of the MoEYS in recent years, and the school principal also meets with principals in his region to share his experience and coach schools with similar plans.

School 3: Santhormuk primary school in Toul Kork District, Phnom Penh City

Santhormuk primary school is one of the eight modern curricular primary schools that increased instruction time through a public-private-nonprofit partnership and financial contribution from parents. With the approval from the MoEYS, a Digital Learning Center (DLC) is established in the public primary schools to manage the full-day learning program financed by parental contributions. The supplementary lessons in this program take place in classrooms that would otherwise be used for a regular public school during a double-shift schedule. To manage the operation of the full-day programs, DLC receives technical support from a private company, AI academy. Parental contributions are used as capital investment to fully finance the classroom renovation (for example, equipping air conditioner, closed-circuit television, projector, and wireless networking technology) and cover recurrent cost such as teacher incentives, utility cost, and procurement of learning materials.

Before DLC in Santhormuk in primary school is operational, a thorough process of identifying potential schools, obtaining approval, and setting up human and physical infrastructure is followed. Initially, potential primary schools with available space are identified and studies assessing the local market and affordability in the area are conducted. Selection of potential schools is also guided by the Primary Education Department. Discussions with school management and parents are made and report on parents' interests in the modern curricular programs is submitted to the central ministry for the official approval of setting up DLC. Once established, DLC, with technical support from AI academy, modernized classrooms and buildings and recruited and trained teachers and relevant staff to ensure the readiness for accepting students.

DLC increased the number of lessons per week from 25, which is typical of the regular classes in Santhormuk primary school, to 40 and used the additional instruction time on foreign languages, ICT, science, technology, engineering, and mathematics (STEM), critical thinking, and physical education. Students enrolled in DLC programs attend regular classes of five lessons per day from Monday to Friday from either 7 a.m. till 11 a.m. or 1 p.m. till 5 p.m. and take three extra lessons from either 7 a.m. till 10 a.m. or 1 p.m. till 4 p.m. A huge proportion of the extra lesson time is dedicated to foreign languages with seven to nine English lessons depending on the grade levels and two Chinese lessons per week. STEM lessons expose students to coding and robotics and are offered twice per week across all grades while the two ICT lessons per week are only available to upper primary classes. While the lessons of the regular classes are taught by civil servant teachers, the extra instruction is delivered by contract teachers recruited by DLC.

A total of 57 members—15 government teachers, 10 contract teachers, 6 DLC management staff, and 26 supporting staff—are on the payroll of DLC to support the functioning of this model. The 10 contract teachers providing the extra lessons are paid KHR 600,000 to KHR 1,000,000 (US$150–250) per month based on their experience, while the civil servant teachers receive a monthly salary of KHR 800,000 to KHR 1,000,000 (US$200–250) along with an annual increase of 5–10 percent depending on their length of service with DLC.

Parents are enticed by the quality of the education offered by DLC in Santhormuk primary school, which is on par with or better than some small private schools although they hope that the fee could be lowered. Parental contributions can be paid annually at KHR 1,800,000 (US$450), biannually at KHR 1,000,0000 (US$250) per semester (totaling KHR 2,000,000 [US$500]), or monthly at KHR 220,000 (US$55) for 10 months (totaling KHR 2,200,000 [US$550]). An additional KHR 200,000 (US$50) admin fee is required annually. Lunch is provided at the additional cost of KHR 180,000 (US$45) per month, but parents can also pack lunch for their children and have them supervised during mealtime for KHR 60,000 (US$15) per month. Around 50 percent of the parents opted for the lunch program rather than bringing their kids out of school due to convenience. Almost all parent representatives used to have their children in private schools or afternoon tutoring programs but believe their kids showed more improvement with DLC and thus are willing to pay the annual fee.

Source: Interviews with school principals, administrators, teachers, and parents (2024).

5.4 Policy Options - Cost Estimates

133. **This subsection briefly presents cost estimates for implementing the different policy options to increase instruction time in Cambodia's primary education (for a more detailed discussion, including the applied methodology, please consult Appendix 7.5).** The estimates presented in this section will focus on two *binding constraints* to implementation: (a) infrastructure (that is, classrooms and ancillary facilities) and (b) HR (that is, in-class teaching hours). Different policy options to increase instruction time will result in additional shortages in classrooms and teacher in-class teaching hours and *cannot* be implemented if these shortages are not addressed.[58]

[58] However, the implementation of the policy options presented in this section will require increased spending on a range of education spending categories (in addition to salaries and classrooms), including teacher pensions and allowances, investments in school facilities, asset maintenance and repairs, utilities, teacher and learning materials, school operational funds, salaries for additional administrative staff (at DEOs and PEOs), and potentially student lunches.

Infrastructure Needs and Investment Costs

134. **Classroom shortages are calculated by applying a classroom-per-class (CR/C) ratio, depending on the split-day, full-day, or varied-day configuration.** In the split-day configuration, a 0.5 CR/C ratio is applied (1 class needs 1 classroom for only half the day). In the full-day configuration, a 1 CR/C ratio is applied (1 class needs 1 classroom for a full day). In the varied-day configuration, a CR/C ratio between 0.5 and 1 is applied (some classes need a classroom for half the day, and some classes need a classroom for a full day).[59] Moreover, the estimates will use an up-to-date cost estimate for classroom construction as the main cost driver and multiply the estimate with a fixed index for costs for ancillary facilities (for example, washrooms and libraries).[60]

135. **In the current (status quo) split-day configuration, an estimated US$10.2 million capital investment is required to address the existing classroom shortage of 429;** see Table 8. The estimate of the existing classroom shortages assumes that current single-shift schools could also use their classrooms twice a day. If current single-shift schools would continue to run only one shift per day (in a split-day configuration), the estimated investment required to address existing shortages is substantially higher (that is, US$75 million to address a shortage of 3,146 classrooms).

136. **In a full-day configuration, an estimated US$387.1 million capital investment is required to address a total classroom shortage of 16,240;; thus, switching to a full-day configuration requires an additional US$376.8 million capital investment;** see Table 8. When each class needs its own classroom for the whole day, 16,240 classrooms will need to be constructed. However, when only two classes (for example, grades 5 and 6) out of six need their own classroom the whole day, 6,539 classrooms will need to be constructed, and if four out of six classes need their own classroom the whole day, 14,075 classrooms will need to be constructed.

Table 8: Cost estimates for investments required in classroom construction, by lesson schedule configuration

	Classrooms per class	Classroom shortage	Investment costs *Estimate* (US$, millions)
Split-day configuration (*2 classes in one classroom*)	0.500	429	10.2
Full-day configuration (*1 class in one classroom*)	1.000	16,240	387.1
Varied-day configuration (*2 grades with full-day schedules*)	0.667	6,539	155.8
Varied-day configuration (*4 grades with full-day schedules*)	0.833	14,075	335.5

Source: World Bank staff calculations based on Education Management Information Data 2022–2023.

Human Resources Needs and Recurrent Costs

137. **Cost estimates of additional instruction time depend on how planning and teacher in-class teaching norms are applied and on *how* the MoEYS will mobilize and finance the additional**

[59] These calculations are applied at the school level, and thus deviate from what would be calculated at the aggregate level. Moreover, classroom shortages from single-shift school with a split-day configuration will still be calculated using a 0.5 CR/C ratio, thus assuming they could switch to two shifts to adjust for existing shortages. All classroom shortages are rounded up.

[60] There are important shortcomings to these estimates. First, the cost estimate per classroom is fixed and does not vary based on the location where the classroom is to be built (urban, rural) nor on the distribution or number of classrooms to build in a single location (that is, building 10 classrooms in a single location is more cost-efficient than building 10 classrooms in 10 different locations). Second, the estimates are based on imperfect infrastructure data, which needs to be improved for it to be useful for actual classroom construction planning.

HR to create more in-class teaching hours.[61] Estimating recurrent costs for additional teaching hours is less straightforward than infrastructure investments, as there are different ways to finance and/or regulate teaching time. Cost estimates for *recruiting new teachers* are based on the average cost of a teacher FTE as well as the need for additional teacher FTEs under different reform options. Whereas cost estimates for *paying existing teachers to teach more hours per week* are based on examples of stipends paid in existing full-day schooling initiatives (see subsection 5.3).

138. **The additional recurrent costs of split-day configurations depend on the policy options (that is, methods used for increasing instruction time and mobilizing additional HR) and vary from US$27 million to US$68 million;** see Table 9. The current curriculum provides 728 intended instruction hours per year at an estimated recurrent cost of US$282.2 million for teacher salaries. The first split-day reform option, adding a single (40-minute) lesson each day, would increase instruction time by 20 percent (874 hours) and would increase salary spending by 9 percent (US$27 million) if existing teachers are paid US$40 monthly stipends or 20 percent (US$57 million) if additional teaching is mobilized by newly recruited teachers. The second split-day reform option, replicating the 'Malaysian model', would increase instruction time by 24 percent (903 hours) and would increase salary spending by 12 percent (US$33 million) if existing teachers are paid US$50 monthly stipends or 24 percent (US$68 million) if additional teaching is mobilized by newly recruited teachers.

Table 9: Cost estimates for additional HR recurrent costs, by lesson schedule configuration

		Instruction time		Additional recurrent costs *estimate* (US$, millions)	Primary teacher wage bill increase *estimate* (%)
		Weekly	Annually		
	Split-day configurations				
1a	Current week schedule	19.2	728	—	0
1b	Add 1 morning lesson (40 minutes)	23	874	27–57	9–20
1c	The 'Malaysian model'	23.8	903	33–68	12–24
	Full-day configurations				
2a	Add 3 afternoon lessons (40 minutes) *on 5 days only*	29.2	1,108	80–148	27–52
2b	Add 2 afternoon lessons (50 minutes) *but reduce to 5 days*	25	950	86–139	31–49
2c	The 'Thai model'	30	1,140	40–160	14–57

Source: World Bank staff calculations based on Education Management Information Data 2022–2023 and estimates of (a) average annual cost per teacher based on 2024 Teacher and School Survey data and (b) average annual cost of contract teacher and double-shift teacher based on individual salary payment sheets retrieved in 2024.

[61] In this subsection, the existing teacher shortage and associated cost estimates, based on the teachers per class norm, will be calculated separately. Thereafter, the additional need for in-class teaching hours and associated recurrent costs will be calculated for different policy options *under the assumption that the current teacher-to-class ratio (1.05) will be maintained.* This meant that there are currently 1.05 primary teacher positions per class and estimates of additional costs associated with reforms will assume that this ratio will be maintained.

139. **The additional recurrent costs of full-day configurations depend on the policy options (that is, methods used for increasing instruction time and mobilizing additional HR) and vary from US$80 million to US$160 million;** see Table 9. The first full-day reform option, adding three (40 minutes) lessons on 5 lesson days, would increase instruction time by 52 percent (1,108 hours) and would increase salary spending by 27 percent (US$80 million) if existing teachers are paid US$120 monthly stipends or 52 percent (US$148 million) if additional teaching is mobilized by newly recruited teachers. The second full-day reform option, adding two (50-minute) lessons and switching to a 5-day lesson week would increase instruction time by 30 percent (950 hours) and would increase salary spending by 49 percent (US$139 million) if existing school-level staff are paid US$175 monthly stipends or 31 percent (US$86 million) if additional teaching is mobilized by newly recruited teachers. The third full-day reform option, replicating the 'Thai model', would increase instruction time by 57 percent (1,140 hours) and would increase salary spending by 57 percent (US$160 million) if additional teaching is mobilized by newly recruited teachers.

140. **However, if HR reforms result in more weekly teaching per teacher, this would significantly reduce the costs of these options.** For split-day configurations, HR reforms could (theoretically) result in no additional costs or even costs savings whereas for full-day configurations it could significantly reduce costs. For example, it could decrease the additional recurrent costs of the Thai model from US$160 million to US$40 million if instruction time per teacher is increased to 25 hours per week. Even if instruction hours per teacher per week would increase only slightly (for example, 1 or 2 hours), this would considerably reduce costs.

5.5 Discussion

141. **This section on increasing instruction has demonstrated that there is considerable potential to increase intended and actual instruction time in Cambodia, at fairly low costs (or no cost at all).** Actual instruction time loss due to teacher absenteeism in Cambodia's primary education appears comparatively high and could be reduced if more effectively addressed. In addition, the MoEYS could reduce instruction time loss by clarifying (and strictly enforcing) the school year calendar (identifying official school closures and monitoring reopening), a measure that might be easier to implement than reducing teacher absenteeism. Furthermore, the MoEYS could consider increasing intended instruction time by extending the number of instruction weeks per year (for example, 40).

142. **The split-day configuration options discussed in this section suggest that intended instruction time in primary education could be increased considerably without applying full-day schedules.** The examples presented in this section demonstrate that split-day configurations can still yield considerable instruction time gains, increasing annual intended hours to 874 when adding one lesson per day and to 903 when switching to a Malaysian model. Combined with increasing instruction weeks, the Malaysian model would result in 950 annual intended instruction hours, the equivalent of the NGS yield discussed in subsection 5.3, but without crossing the lunch break, and at significantly lower costs; see appendix 7.4. It is important to stress that if the MoEYS' primary aim is to increase annual intended instruction hours, there are low-cost reform options that yield substantial instruction time gains.

143. **Unfortunately, existing initiatives to increase instruction time have limited value for informing policy development and the design of a *nationwide* intervention to increase primary school instruction time.** Four reasons that limit the utility of these initiatives are briefly highlighted here. First, **the existing initiatives are likely not scalable to all primary schools.** The outstanding reputation and performance of these schools, combined with enrollment from high-income households, enable a level of resource mobilization that cannot be replicated at 'mediocre schools', let alone schools in low-income communities. Second, **the existing initiatives are relatively inefficient** (high cost for limited additional time), due to their full-day school schedule and additional pay for extra time. This option will most likely be fiscally unaffordable and cannot be

financed through parents' OOP expenditures in most communities. Third, **the existing initiatives (arguably) score poorly on efficacy.** Most enrolled students enjoyed private education before the introduction of the full-day curriculum at their schools. The initiatives primarily reduced OOP costs for their parents. Yet, they (arguably) did little to increase student learning outcomes. **The existing initiatives form an unreliable sample** for evidence-based policy development due to the lack of robust impact evaluation and their relatively high student performance (and socioeconomic status) compared to most schools. **Nonetheless, the existing initiatives are helpful in illustrating options and variations in cost-efficiency as well as the liberal regulatory environment.**

144. **The MoEYS could consider a *differential approach,* where 'low household income schools' receive direct support to establish a limited equity fund, whereas 'high household income schools' are enabled and supported to establish afternoon programs financed through parent contributions.** This differential or pluriform approach to increasing instruction time could allow parents to finance full afternoon programs at their discretion (thereby benefiting from parents' willingness to pay and saving costs), *and in parallel* the MoEYS could promote equity through the direct funding of (some) additional instruction time in schools in low-income areas.

145. **However, such an approach should still be cognizant of the inherent risks associated with the methods used by schools that have already introduced full-day lesson schedules.** Allowing parents to pay teachers to teach *during official working hours, while teachers are not complying with the official teaching norms,* might result in a perverse incentive structure. Similar to issues related to private tutoring, teachers might prioritize effort for parent-financed lessons, at the expense of publicly (MoEYS) financed lessons, as they will be held more accountable to the former. Moreover, **allowing teachers to teach *less* than the official teaching norms, and then permitting parents to pay them to teach *more,* constitutes a de facto endorsement of noncompliance.** This might further complicate the enforcement of HR regulations in the future.

146. **The estimates presented in this section demonstrate that the investment and recurrent HR costs of increasing instruction time are highly dependent on the methods used and that substantial time gains can be introduced at relatively low costs.** For example, introducing a full-day curriculum, similar to School 2 (option 2b) for 950 hours per year across all primary school would cost an estimated US$139 million annually and would require a US$387 million investment in classroom construction, whereas introducing a Malaysian model would result in 903 hours and could potentially costs only US$33 million annually and would require only a US$10 million investment in construction.

147. **Moreover, the cost estimates demonstrate how significantly the spending efficiency varies across the existing full-day configuration initiatives that pay stipends to existing teachers.** Two examples of full-day school schedules of existing initiatives were used in the above presented cost estimates. The first school (2a) increased annual instruction hours to 1,108 and the second school (2b) increased annual instruction hours to 950. However, the estimated cost *per hour of additional instruction* is three times higher at the second school. If the schedule and payrate of the first school are rolled out across Cambodia's primary education schools, it would cost an estimated US$210,198 per annual hour added to the curriculum, whereas if the schedule and payrate of the second school are rolled, it would cost an estimated US$625,958 per annual hour added to the curriculum.

148. **The cost estimates demonstrate the impact that HR reforms (adjusting weekly instruction time per teacher) can potentially have on the recurrent costs of split- and full-day curricula.** Although in practice it might not be feasible to increase instruction time per teacher to 25 hours per week, even marginal changes to the in-class teaching norm would have a considerable impact on recurrent costs. For example, in the Thai model option (2c), if weekly teaching hours per teacher are increased by 1 hour, this reduces recurrent costs by around US$15 million to US$19 million.

6 Discussion and Recommendations

149. **This section summarizes the discussions presented in this report and identifies three priority recommendations for policy reform** in the context of the ongoing policy discussion within the Royal Government of Cambodia, and more broadly among Cambodia's education sector stakeholders, on the need to increase instruction time in primary education schools, to improve student learning outcomes and strengthen the foundation of its general education program.

Priority Recommendation 1

The MoEYS should adopt a long-term and iterative approach to instruction time reforms—ensuring the optimal outcome of its investments in student learning through pilot-testing different school day arrangements and robustly measuring their impact. In parallel, the MoEYS should continue to invest in the *quality* of instruction time to ensure the efficacy of the reforms.

150. **The MoEYS should consider a long-term and iterative approach to instruction time reforms to ensure the optimal outcome of its investments in student learning.** The findings presented in this report, including the review of academic literature and case studies, as well as the Cambodian curriculum and the comparison to its ASEAN peers, suggest that similar reforms in other countries often took more than a decade to roll out, and sometimes countries had to adjust their reforms midway to improve the desired results. Moreover, neither high annual instruction time hours (for example, more than 1,000 per year) nor full-day lesson schedule configurations guarantee strong improvements on student test scores in literacy and numeracy. These lessons learned, and these uncertainties regarding results, suggest the MoEYS should assume a long-term approach that allows time to *find out what works, before a full and permanent rollout across the system*. To ensure results in student learning, the MoEYS should explore different methods and policy options and assess what is fiscally affordable and cost-effective and yields results. This might mean that an initial set of reforms does not immediately take the primary school system to the desired 'end state', and it could mean that in an initial phase, multiple methods are applied in parallel across different primary schools.

151. **The MoEYS should pilot-test reform options and robustly measure their impact on student learning before rolling out reforms to the more than 7,000 public primary schools in Cambodia.** Findings from the literature and case studies are heterogenous in terms of *what is critical to achieve results* and demonstrate that results overall are not guaranteed. This strongly implies that the MoEYS should first establish *if a reform intervention is effective* before investing in the required infrastructure and committing to additional recurrent education spending. The MoEYS should avoid conflating multiple reforms while piloting, as this would complicate the attribution of the measured effects (if any) on learning. Existing primary school full-day initiatives are not designed as robust pilots, as they are not based on random sampling, did not include baseline measurements, and typically involved a range of reforms and investments. Moreover, although pilot-testing instruction time reforms can be expensive and time-consuming, the MoEYS could still consider testing multiple options, *so as to find an option that yields results,* arguably justified by the considerable time and investments required to eventually implement the reforms.

152. **The MoEYS should consider low-cost options to increase instruction time as reforms typically yield modest results and are considered the least cost-effective measures to improve student learning outcomes.** If the aim of reforms is narrowly defined as increasing instruction time (that is, increasing the number of instructional hours per year) to improve student learning outcomes, then the MoEYS should consider low-cost (and no-cost) options to achieve this; see section 6.

Split-day configurations allow for increasing instruction time up to more than 900 hours per year (assuming a Malaysian schedule would be acceptable with Cambodia culture norms and practices). Moreover, reducing official and unofficial school closures could further increase actual instruction time at little or no cost.

153. **The MoEYS should invest in the *quality and effectiveness* of instruction time to ensure the efficacy of the instruction time reforms.** Although the literature and studies do not uniformly identify moderating factors and the overall academic debate is not conclusive on what affects the relation between instruction time and student learning, the MoEYS should nonetheless invest in what are likely moderating factors. In Cambodia, increasing instruction time might have little (if any) effect on student learning if not in tandem with investments in education quality, including in-service training (INSET) and methods that have proven to be effective in Cambodia (such as the early grade learning methods) as well as education practices that have a proven track record internationally (for example, teaching at the right level, structured lesson plans, remedial teaching for slow learners, and providing information on the benefits of education).[62] Importantly, instruction time reforms (that is, switching to full-day schooling) should *not* be considered a stand-alone measure to improve student learning and should not replace or prevent measures addressing education quality.

154. **There is good evidence that interventions supporting teachers with structured lesson plans (with linked materials and ongoing teacher monitoring and training) and targeting teaching instruction by learning level, not by grade (in or out of school), can be highly cost-effective across a variety of contexts.** In contexts where primary school teaching focuses on rote learning, and teacher knowledge is low, step-by-step lesson guides can help improve pedagogy. Materials, ongoing training, and monitoring are required to enable teachers to use the plans effectively. A key benefit is that this approach can work even with weak teachers.[63] In a randomized controlled trial across 169 rural villages in the Gambia, scripted lesson plans, after-school supplementary classes, and frequent monitoring and teacher coaching dramatically improved learning outcomes.[64] Moreover, in contexts where there is a wide variety of learning levels within a class and student learning levels are below grade-level curriculum expectations (as is often the case in MICs such as Cambodia), implementation approaches that provide targeted help for students who are falling behind and group children for all or part of the day based on their learning level, not on their age, have proven to be cost-effective. This can be done with government teachers, volunteers, or teaching assistants and implemented during school, make-up classes after school, or during holidays. A very specific and structured approach to doing this has been tested in Ghana, India, and Zambia. A less structured approach is to introduce tracking, where children are grouped by their initial level of learning. This was highly cost-effective in Kenya, but it often meets with resistance.[65]

155. **Moreover, the MoEYS should clearly identify the objectives and the target groups or beneficiaries of instruction time reforms to inform the design of a policy intervention.** The literature and case studies on increasing instruction time and full-day schooling found a range of educational (for example, reduce dropout), social (for example, reduced risk-taking), and economic (for example,

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62 World Bank. 2020. *Cost-Effective Approaches to Improve Global Learning: What Does Recent Evidence Tell Us Are "Smart Buys" for Improving Learning in Low- and Middle-Income Countries?* Washington, DC: World Bank.

63 On the effectiveness of teacher guides and scripted lessons plans see, for example, Piper, B., Y. Sitabkhan, J. Mejía, and K. Betts. 2018. "Effectiveness of Teachers' Guides in the Global South: Scripting, Learning Outcomes, and Classroom Utilization."

64 World Bank. 2020. *Cost-Effective Approaches to Improve Global Learning: What Does Recent Evidence Tell Us Are "Smart Buys" for Improving Learning in Low- and Middle-Income Countries?* Washington, DC: World Bank, p. 12.

65 For an overview of what works best where and a discussion of scalability, see Banerjee, A., R. Banerji, J. Berry, E. Duflo, H. Kannan, S. Mukerji, M. Shotland, and M. Walton. 2017. "From Proof of Concept to Scalable Policies: Challenges and Solutions, with an Application."

increased employment and income for mothers) benefits beyond student learning outcomes. The MoEYS might justify the additional investments and spending required to introduce full-day schooling by identifying these benefits as objectives. However, these objectives should be explicit, so that they can be critically reviewed on their own merits and to ensure that these objectives are included into the design of the reforms (for example, increasing time while maintaining a split-day configuration would have little impact on the parents' labor force participation). Similarly, the target group or beneficiaries should be explicitly considered in the design of policies. In affluent communities, reforms might yield limited *net* results on student exam scores, as most students from high-income households are already enrolled in private tutoring, and introducing full-day lesson schedule configurations will likely replace their existing afternoon programs.

156. **In this context, the MoEYS should consider its commitment to promoting equity and creating equal education opportunities.** Most of the (experimental) initiatives of primary schools, to increase instruction time and introduce full-day lesson schedule configurations, have received some support from the MoEYS, through direct financial support, in-kind support such as additional teachers and classrooms made available, or both. Moreover, these schools are often catering to relatively affluent students from high-income households, who would otherwise be enrolled in private tutoring classes, afternoon programs, or private schools altogether, and who *typically were enrolled in some form of private education before the full-day configuration was introduced.* Many of these initiatives require additional public spending, which is disproportionally benefitting high-income households, while most likely having little (if any) *net* impact on the enrolled students' learning outcomes. The MoEYS should be cognizant that prioritizing support to full-day schooling in affluent communities will exacerbate educational inequality, yield little if any net results in terms of student learning, and is an intrinsically regressive policy measure.

157. **Finally, it is important to consider that many methods of increasing instruction time and policy reforms options are not mutually exclusive and the MoEYS should apply them in tandem, rather than choose between them.** Full-day lesson configurations might be especially attractive to students from households where both parents work outside of the house, so as to create a form of child day care. The MoEYS could choose to *facilitate* schools in affluent communities to establish afternoon programs financed through parent OOP contributions, by easing regulations and providing training to school managers (both in Viet Nam and Korea, parents pay nontrivial fees for public schools) while also investing in instruction time by expanding lesson time in the morning (that is, split-day configuration) in all schools, and by implementing measures across the system to reduce instruction time loss.

Priority Recommendation 2

The MoEYS should combine investments in additional instruction time (adding lessons to the school day) with measures to reduce teacher absenteeism, tardiness, and school closures—integrating additional lessons in the weekly curriculum (and more lesson days and weeks to the annual school calendar) with measures reducing instruction time loss, to ensure the maximum cumulative impact of the reforms.

158. **The MoEYS needs to be aware that some of its current initiatives to establish full-day schools are very costly methods for achieving a goal that could (if narrowly defined as increasing instructional hours per year) be achieved at much lower costs.** Instead of a singular focus on investing in additional lessons during the day and week schedules, the MoEYS should integrate these investments with measures to increase the overall number of school days in the year (that is, adding weeks to the school calendar) and to reduce (unofficial) school closures, teacher

absenteeism, and tardiness. These measures can be implemented at significantly lower costs (or almost no cost at all) and can amplify the cumulative gains achieved through reforms. This can be best illustrated by describing two different methods and options (the highest- and lowest-cost options), both achieving an increase to 950 instruction hours per year in the following two examples.

159. **First, the MoEYS could increase instruction time to 950 hours per year by introducing a full-day lesson schedule configuration similar to option 2b (see subsection 5.2).** This option would require an estimated capital investments of US$387 million to construct additional classrooms (so that each class would have its own classroom) and an estimated further US$139 million in recurrent spending (a 46 percent increase in the teacher wage bill) to pay for teacher and school-level staff stipends (US$175 per month for 10 months per year).

160. **Second, the MoEYS could increase instruction time to 950 hours per year by introducing a split-day configuration similar to the 'Malaysian model' and increase annual lesson weeks to 40.** The split-day schedule would require teachers to be at school for 26.25 hours per week (5 hours and 15 minutes per day, 5 days per week), resulting in a marginal increase compared to the current 24 hours on a typical week but also reducing the number of lesson days per week (from six to five). The MoEYS would still need to invest US$10.2 million in classroom construction (so that there is at least one classroom for every two classes) and an estimated additional US$33.3 million in recurrent spending (a 11 percent increase in the teacher wage bill) to pay for teacher stipends (US$$50 per month for 10 months per year). Moreover, in the six years following the reform, the MoEYS limits functional allowance increases so that over time the inflation-adjusted *real* spending on stipends is further reduced.

Priority Recommendation 3

The MoEYS and MCS should strictly enforce teaching norms and working hours regulations to all teachers—ensuring the minimum required in-class teaching hours (that is, instruction time) and hours worked outside of the class are met and reducing the prevalence of secondary jobs to limit the costs of instruction time reforms and facilitate implementation.

161. **The MoEYS and MCS should strictly enforce HR management regulations, to increase the number of in-class teaching hours (that is, instruction time) per teacher, to limit the costs of instruction time reforms.** The cost estimates discussed in subsection 5.4 demonstrate the potential impact of adjusting HR management regulations on the costs of reforms. Rough estimates of potential savings (depending on the exact policy option) suggest that if teachers would teach an additional hour in class per week, it could reduce recurrent salary spending by US$15 million to US$18 million. However, many school principals and education officials interviewed for this study expressed their expectation that *'teacher won't work more hours unless they are paid more'.* While it might indeed be challenging to make teachers teach more (without substantial additional pay), and it might not be feasible to make teachers teach the full 25 hours per week (as currently prescribed by teaching norms), there are still HR management reform options that would increase instruction time per teacher, which could be introduced with limited additional costs. In the following paragraphs, three options are discussed in more detail. For the successful implementations of these options, it will be key that the MoEYS involves Cambodia's teacher associations in the design of the reforms and builds consensus around the need for policy adjustments.

162. **First, the MoEYS could introduce a new school lesson schedule (and teaching norm) that requires teachers to teach more hours per week (or per year) without additional pay and enforce compliance of *all* teachers to this new framework.** While it might be challenging to make teachers work full days, it might be easier to increase the number of lesson weeks per year, as this would not conflict with other responsibilities. A temporary measure to increase lesson weeks (that is, by reducing the duration of the long vacation break [know as *'vacances'*]) was briefly introduced in 2021 to compensate for time lost due to the COVID pandemic. In addition, the MoEYS could introduce a more compact schedule in a split-day configuration, where instruction time is increased within the morning shift, by removing or reducing in-between breaks (similar to the Thai and Malaysian models). Moreover, to mitigate teacher resistance to teaching norm reforms, the MoEYS could apply a long-term approach and gradually adjust the norms over time (for example, increasing the norms by an hour per week every 2 or 3 years instead of a single 4-hour adjustment).

163. **Second, the MoEYS could compensate teachers for teaching more, but phase out the additional recurrent costs by limiting salary adjustment in the following years.** This option is especially practical for smaller stipends or salary increases and could be applied to all teachers or only to teachers that accept to work according to the new teaching norm. Year-on-year increases of primary teacher salaries averaged 16.3 percent between 2013 and 2023, and assuming such a trend would continue it would require only a 2-year freeze to phase out additional recurrent spending (or a 4-year freeze considering if the MoEYS would only freeze the functional allowance and not the civil servant base salary). Even if salary increases are considerably lower than in the past decade, temporarily freezing salaries (in combination with inflation) could effectively phase out the costs of 20 to 30 percent teacher stipends over a 5- to 10-year period.

164. **Third, the MoEYS and MCS could introduce and enforce a new teaching norm *for new teachers only* and make acceptance of the new norm an explicit part of recruitment and appointments.** The MoEYS could introduce a new teaching norm (and potentially school week schedule and curriculum) increasing instruction time per teacher from the current de facto norm of 19.2 hours (or 16.7 if remedial lessons are excluded) to 22 or even 25 hours per week. This 'new full-time teacher' norm could be applied to all new recruitment and would differ from the 'old part-time teacher' norm. Formal acceptance of the new norm could be made an explicit requirement for teacher recruitment and appointment, both for new civil servant teachers as well as contract teachers. Compliance to the teaching norm could even be made a condition during an initial civil servant 'probation' period, for example, a three-year period during which a civil servant teacher could still lose her/his semipermanent appointment due to noncompliance. The percentage of the teacher workforce who would fall under the new norms could already be 33 percent next year, as 33 percent of the current teacher workforce (teaching positions) is already renewed each year (that is, for contract teachers and double-shift positions), and this could rise to 55 percent in 2033 due to retirement and teachers leaving the workforce; see *Teaching Quality in Cambodia's Primary Education - Toward Incentivizing Effort, Performance, and Quality Assurance* (2025).

165. **However, the high prevalence of teacher secondary jobs is a key impediment to increasing the teaching per teacher norm that the MoEYS and MCS need to address (at least in the long term).** Single-shift teachers reported working on average 8.2 hours per week 'outside of the class' and 21 percent reported working less than 4 hours 'outside of the class' per week. Moreover, five out of six teachers (84 percent) report earning additional income through secondary jobs (including double shifts). In reality, hours worked outside of class could be considerably lower and the prevalence of secondary jobs could be still higher due to the social desirability bias in self-reported data. In this context, most teachers will be negatively affected if teaching norms are

increased, as it impedes their ability to work on the side and reduces the additional income they can earn. Secondary jobs might be *the most important reason* why teachers would resist teaching more hours per week.

166. **Notwithstanding the teaching per teacher norm, introducing full-day schools (that is, full-day lesson schedule configurations) *without teachers being available the full day* will be exceedingly difficult.** This can be illustrated by considering the 'Thai model' as a lesson schedule example (option 2c), where six 1-hour lessons are scheduled evenly, 3 hours before and 3 hours *after* lunch, for 5 days per week. There are only 15 instructional hours *before* lunch (per week) and only 15 hours after lunch, and it is not possible to schedule teacher's full weekly workload (for example, 19.2 instruction hours per week) in only one part (morning or afternoon) of the day. Similar issues arise if one or more afternoon lessons are added to the existing schedule (options 2a and 2b). These schedules require either teachers to teach more *or* teachers to be available the whole day (*or* recruiting a high number of part-time teachers).

167. **In addition, the high prevalence of teacher secondary jobs likely already has a detrimental impact on student learning as it results in lower teacher effort.** Teachers report typically working an additional 18 hours per week (median) on top of their regular teaching job at the primary school. Often these additional hours consist of class time (that is, private tutoring, double shifts, and private school teaching). This puts typical class time for many teachers at 42 hours per week (including 24 hours at the primary school) which undoubtedly overburdens many teachers, reducing their ability to effectively teach (teachers are expected to teach less than 40 hours per week in part because it is exceptionally strenuous and in part because it requires preparation). In addition, a visit to the doctor is more likely planned during the teacher's public primary school class time as absenteeism on the secondary job (for example, private tutoring) might have a more immediate impact on income. Findings in this study also suggest that many teachers are providing private tutoring (paid by parents to teachers) at their own school, outside of regular class time, while the teacher norms instruct teachers to support slow learners during that time at school. Secondary jobs thus often prevent teachers from doing their primary teacher tasks as intended.

168. **The high prevalence of teacher secondary jobs likely already results in teacher absenteeism, actual instruction time loss and reduced effectiveness of education practices**. During one school visit, conducted for this study, all lessons at the primary school were canceled (as per instruction of the provincial education office circular) because teachers had to prepare annual student progress reports. Thus, instead of teachers preparing these reports during the afternoon (that is, during their 15 hours of prescribed outside-of-the-class work per week), a regular lesson day had to be canceled (resulting in instruction time loss) because teachers did not have time to prepare these reports otherwise. Secondary jobs likely reduce the number of hours worked outside of the class, even though those hours are prescribed by the norms to prepare lesson plans and support slow learners (teacher activities that are associated with improvements in student learning).

169. **Even without instruction time and HR management reforms, the MoEYS and MCS should clarify the curriculum, teaching norms, and HR regulations and more strictly enforce compliance.** There is currently a considerable gap between teaching norms and instruction time, and significant ambiguity in how the norms should be applied. It is not clear if the breaks in between lessons should be counted as in-class teaching time, if the Thursday lessons (typically attended by almost all students according to teachers surveyed in 2024) should be considered remedial or regular teaching, and if they count as in-class teaching time. Moreover, compliance with guidance on the school calendar, and on what days schools are supposed to provide lessons and thus when teachers are supposed to teach, appears to be low and should be improved to reduce

unnecessary instruction time loss. While the MoEYS and MCS should not try to get involved in what teachers do during their spare time, a clarification of HR norms is required to ensure that teachers are not working second jobs during official working hours.

170. **Finally, the MoEYS should strengthen its data management and testing practices to develop a more robust knowledge foundation for decision-making and policy development.** The MoEYS should improve existing datasets on HR (ensuring all contract modalities and overtime payments are included in a single database) as well as education (EMIS) and assets (school building, construction, and maintenance needs). It should also aim to synchronize datasets (payroll, HRMIS, and EMIS) to enhance reliability.

Table 10: Recommendations Overview

Priority Recommendation 1
The MoEYS should adopt a long-term and iterative approach to instruction time reforms—ensuring the optimal outcome of its investments in student learning through pilot-testing different school day arrangements and robustly measuring their impact. In parallel, the MoEYS should continue to invest in the *quality* of instruction time to ensure the efficacy of the reforms. • Pilot-test reform options and robustly measure their impact on student learning. • Consider low-cost options to increase instruction time. • Invest in the quality and effectiveness of instruction time. • Identify the objectives and the target beneficiaries of instruction time reforms. • Apply multiple different methods for increasing instruction time in tandem.
Priority Recommendation 2
The MoEYS should combine investments in additional instruction time (adding lessons to the school day) with measures to reduce teacher absenteeism, tardiness, and school closures—integrating additional lessons in the weekly curriculum (and additional lesson days and weeks to the annual school calendar) with measures reducing instruction time loss, to ensure the maximum cumulative impact of the reforms. • Reduce unofficial school closures as well as teacher absenteeism and tardiness. • Carefully consider the cost-effectiveness of different methods to increasing instruction time.
Priority Recommendation 3
The MoEYS and MCS should strictly enforce teaching norms and working hours regulations to all teachers—ensuring the minimum required in-class teaching hours (that is, instruction time) and hours worked outside of the class are met and reducing the prevalence of secondary jobs to limit the costs of instruction time reforms and facilitate implementation. • Clarify the curriculum, teaching norms, and HR regulations and strictly enforce compliance. • Increase actual instruction time per teacher. • Address the high prevalence of teacher secondary jobs.
Finally
The MoEYS should strengthen its data management and testing practices to develop a more robust knowledge foundation for decision-making and policy development.

7 Appendices

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7.2 Methodology School and Teacher Survey

Sampling and Samples

171. For comparison with the school and teacher survey conducted by World Bank in 2012, the 2024 survey follows the same sampling approach as the 2012 survey. First, 150 public primary schools were drawn from the 200 public primary schools that participated in the grade 6 NLA in 2021. From each school, the following data is collected:

    1. Students Attendance Form
    2. Teachers Attendance Form
    3. School Principal Survey
    4. Classroom Observation
    5. Teachers Survey
    6. Teachers Math Test
    7. Community Questionnaires.

172. Before survey administration, enumerators coordinated with each school to collect attendance records of teachers and students using the Teacher Attendance Form and Student Attendance Form. The records of teacher attendance were also necessary for the subsequent teacher sampling processes. For the school principal survey, the principal was the primary respondent; however, the deputy principal was interviewed when the principal was unavailable.

173. For classroom observations, two teachers were selected: one teaching Khmer and one teaching math. The selection focused on teachers of grade 3 or grade 4 classes. These teachers were also automatically included in the teacher survey. An additional three teachers were randomly selected from the remaining teaching staff (including those non-teaching staff who were assigned additional teaching shifts).

174. Following the survey, teachers were invited to participate in a math test consisting of 29 problems, including 49 items designed to assess their knowledge of the subject knowledge and pedagogy content. Enumerators provided initial instructions but were not allowed to offer any further support once the test commenced. Teachers were allotted 60 minutes to complete the test. In cases where teachers completed the test early, enumerators encouraged them to review their answers and remain seated until the time limit expires. Of the 727 teachers surveyed in 2024, 725 participated in the math test.

175. For the community survey, four members of the SMC or school supporting committee (SSC) were selected based on a list provided by the school. The head of the committee was automatically included, while the remaining three members were randomly selected from the list. If a selected member was unreachable or unavailable for an interview, a replacement was chosen. In total, 574 school committee heads and members completed the school community survey.

Table 11: Sample sizes by data collection instrument for the 2012 and 2024 surveys.

	Unit	Year 2024	Year 2012
Student Attendance Form	Class	1,933	2,185
Teacher Attendance Form	Individual	2,421	2,258
School Principal Survey	School	150	149
Classroom Observation	Class	300	284
Teachers' Survey	Individual	727	676
Teachers' Math Test	Individual	725	688
Community Survey	Individual	574	543

Data Collection

176. The data collection was carried out by BN Consult, the same firm that collected data in 2012, from February to March 2024. Before data collection, the World Bank team and BN Consult organized a seven-day training session for the 30 enumerators recruited for fieldwork. Following the training, the survey instruments were piloted in six primary schools in late January 2024, based on which the instruments were slightly revised. Sampled schools were informed in advance about the fieldwork, but the enumerators were instructed to not inform schools about the exact date of visit.

177. During the fourth week of data collection, a quality control team member conducted a random spot check using a subset of questions (primarily yes/no questions) from the survey questionnaire. A total of 18 school principals, 46 teachers, and 22 community members were interviewed by telephone to assess the consistency of the collected information. The data from the random spot check was then cross-checked with the main dataset, revealing minimal discrepancies. Upon completion of data collection, the World Bank team conducted a separate spot check with 20 teachers, using a different subset of questions that included multiple-choice items. The error rate in this check was slightly higher than that found by BN Consult; however, after several rounds of validation, most discrepancies could be understood and attributed to the nature of the questions rather than errors made by the enumerators.

7.3 Classification of Disadvantaged Areas

178. In October 2014, the Cambodian government issued Sub-Decree No. 37 on incentives for public servants working in the education and health sectors. Under this sub-decree, public servants working in disadvantaged areas, remote areas type 1 (within provincial towns), and remote areas type 2 (outside provincial towns) are eligible for allowances of KHR 80,000, KHR 100,000, and KHR 120,000, respectively.

179. At the same time, the MoEYS released Ministerial Prakas No. 6303, which classifies schools into remote schools and disadvantaged schools. According to the Prakas, all schools within the seven provinces of Mondulkiri, Ratanakiri, Stung Treng, Oddar Meanchey, Preah Vihear, Koh Kong, and Pailin are designated as remote schools. Schools in the remaining 18 non-remote provinces are classified as disadvantaged or not based on criteria such as transportation challenges, population density below 10 persons per square kilometer, areas subject to permanent flooding or prone to natural disasters, locations near national borders, and incomplete schools (without grades 1–6). The Prakas also provides the names of districts and communes where all schools are classified as disadvantaged as well as the exact names of schools in cases where the entire commune or district is not classified as disadvantaged. This information allows confirmation of whether the 150 sampled schools in this study are included in the list of remote or disadvantaged schools.

180. Neither the incentive amounts nor the list of designated schools has been updated since the issuance of Sub-Decree No. 37 and Prakas No. 6303. At present, the Personnel Department of the MoEYS is working on revisions based on updated criteria.

181. In the school survey, principals were asked to indicate whether their school is located in a disadvantaged area. A similar question was posed in the teacher survey, enabling classification of schools as disadvantaged if 50 percent or more of teachers identified the school as such. An additional list of schools in disadvantaged areas was also acquired from the Personnel Department. Discrepancies emerged among these four sources (the 2014 Prakas, the Personnel Department school list, the principal survey, and the teacher survey) regarding the classification of sampled schools as disadvantaged. To resolve these inconsistencies, the study classifies a school as disadvantaged if it is confirmed by at least three of the four sources. Only 10 schools were evenly divided between disadvantaged and regular classifications; in these instances, classification was determined based on the Prakas list.

182. In this study, all remote schools are regarded as disadvantaged schools. The classification of urban and rural areas is based on the answers from school principals in the school survey.

Table 12: Matched results by recruitment year and year of exam (2014–2024)

Exam Year	TTD 2014	TTD 2015	TTD 2016	TTD 2017	TTD 2018	TTD 2019	TTD 2021	MSC 2024
DEA 2014	1,580	89	38	33	17	10	15	1
DEA 2015	207	1,541	141	79	46	22	43	6
DEA 2016	71	0	1,220	283	81	39	76	3
DEA 2017	43	0	1	1,047	303	114	131	17
DEA 2018	14	0	0	62	898	340	206	25
DEA 2019	9	0	0	0	41	820	304	51
DEA 2020	1	0	0	0	0	30	437	164
DEA 2021	5	0	0	0	0	0	0	153
DEA 2022	0	0	0	0	0	0	0	285
DEA 2023	0	0	0	0	0	0	0	548
Total	**1,930**	**1,630**	**1,400**	**1,504**	**1,386**	**1,375**	**1,212**	**1,253**

Source: MoEYS' Teacher Training Directorate and Directorate of Exam Affairs

7.4 Binding Constraints and Cost Estimates

183. **This section estimates the costs for implementing the different policy options to increase instruction time in Cambodia's primary education, as discussed in Section 5.** Implementation of the policy options presented in Section 5 will require increased spending on a range of education spending categories, including salaries and allowances for additional in-class teaching hours, investments in classrooms and other school facilities, asset maintenance and repairs, utilities, teacher and learning materials, school operational funds, salaries for additional administrative staff (at District Education Offices [DEOs] and PEOs), and potentially student lunches. However, **the estimates presented in this section will focus on two *binding constraints* to implementation: (a) infrastructure (that is, classrooms and ancillary facilities) and (b) HR (that is, in-class teaching hours).** Different policy options to increase instruction time will result in additional shortages in classrooms and teacher in-class teaching hours and *cannot* be implemented if these shortages are not addressed.

Infrastructure Needs and Investment Costs

184. **This subsection will determine the need for additional classrooms for different policy options and estimate the financial investment required for their construction.** Primary schools already have a shortage of classrooms in the current split-day configuration, and existing shortages and investment needs will be identified before estimating the costs of different policy options. The estimates will use an up-to-date cost estimate for classroom construction as the main cost driver and multiply the estimate with a fixed index for costs for ancillary facilities (for example, washrooms and libraries). There are, however, important shortcomings to these estimates. First, the cost estimate per classroom is fixed and does not vary based on the location where the classroom is to be built (urban, rural) nor on the distribution or number of classrooms to be built in a single

location (that is, building 10 classrooms in a single location is more cost-efficient than building 10 classrooms in 10 different locations). Second, the estimates are based on imperfect infrastructure data, which needs to be improved for it to be useful for actual classroom construction planning.

Infrastructure Data

185. **There is no accurate and up-to-date registry of public school buildings and classrooms, to determine the stock of facilities at primary schools and calculate additional needs based on curriculum reforms.** There are three different MoEYS databases on school buildings. First, the asset registry, maintained by the finance directorate, registers assets including buildings and land, but lacks specification for classrooms and the disrepair/condition of facilities. Second, the construction department maintains a database on a relatively small subsection of buildings that require repairs and buildings recently built. Third, the EMIS department maintains a dataset that is based on self-reported school management data, and in addition to 'students', 'teachers' and 'classes', it also includes data on 'classrooms' and 'total rooms'.

186. **The EMIS dataset is the most detailed dataset on classrooms available in primary education schools in Cambodia.** The EMIS dataset includes data on all public schools that fall under the MoEYS management mandate, including 7,388 public primary schools. The data is submitted by school managers (for example, principals or deputies) based on a template developed by the MoEYS and can be submitted in paper form (to the DEO) or electronically. The EMIS data maintained by MoEYS does not include data on the condition of the classrooms and buildings (for example, damage or depreciation), which impedes its utility to forecast replacement, repair, and construction needs.

187. **However, the EMIS self-reported data is not verified in full (for example by an engineer or inspector) and is not reliable enough to accurately identify classroom construction needs**. The dataset is affected by data entry errors. For example, a school entry might include as many 'classrooms' as 'students', most likely resulting from data entry error. Moreover, data might be affected by inaccuracies. For example, school managers might not understand how EMIS indicators are defined and if the 'classroom' indicator should only count used and furnished classrooms or also unused or unfurnished classrooms.

188. **The EMIS database is not accurate and reliable enough to prepare actual classroom construction plans,** nor is it suitable for estimating period maintenance or repairs and renovation costs of school infrastructure. Nonetheless, for this study and the development of estimates for policy options, the data is assumed to be accurate, and no effort is made to 'clean' the data from overt errors or inaccuracies.

189. **According to EMIS data, there are 63,271 primary school classes and 47,031 classrooms across 7,338 primary schools in the 2022–2023 academic year; see Table 13.** A total of 2,869 schools are labeled as '1 shift' (single-shift schools running only one shift per day, typically in the morning from 7 a.m. till 11 a.m.). The single-shift schools have a total of 20,689 classes and 17,821 classrooms.[66] There are another 4,463 schools labeled '2 shift' (double-shift schools running two shifts with different classes in the same classroom, typically the first from 7 a.m. till 11 a.m. and the second from 1 p.m. till 5 p.m.) The double-shift schools have 42,468 classes and 29,153 classrooms. There are also six schools labeled 'triple shifts' or triple-shift schools. It is unclear if these schools are indeed running three shifts (as most have enough classrooms to run only two shifts) and how their schedules are arranged. The triple-shift schools have 114 classes and 57 classrooms.

[66] If these schools indeed have only one shift per day, they have a shortage of 2,868 classrooms (20,689 classes minus 17,821 classrooms).

Table 13: Number of single-shift, double-shift, and triple-shift schools and their classes and classrooms (2022–2023)

	Schools	Classes	Classrooms
Single Shift	2,869	20,689	17,821
Double Shift	4,463	42,468	29,153
Triple Shift	6	114	57
Total	**7,338**	**63,271**	**47,031**

Source: MoEYS' EMIS data for 2022–2023.

Classroom Shortages and Investment Cost Estimates

190. Classroom shortages are calculated applying a classroom-per-class (CR/C) ratio, depending on the split-day, full-day, or varied-day configuration, discussed in subsection 5.2. In the split-day configuration, a 0.5 CR/C ratio is applied (1 class needs 1 classroom for only half the day). In the full-day configuration, a 1 CR/C ratio is applied (1 class needs 1 classroom for a full day). In the varied-day configuration, a CR/C ratio between 0.5 and 1 is applied (some classes need a classroom for half the day, and some classes need a classroom for a full day). Importantly, these calculations are applied at the school level and thus deviate from what would be calculated at the aggregate level. Moreover, classroom shortages from single-shift school with a split-day configuration will still be calculated using a 0.5 CR/C ratio, thus assuming they could switch to two shifts to adjust for existing shortages. Finally, all classroom shortages are rounded up.

191. The investments costs for classroom construction for each school day schedule configuration is estimated by multiplying the classroom shortage by a fixed classroom cost estimate multiplied by an ancillary index. A fixed US$19,861 cost estimate per classroom construction is applied, based on recent cost estimates prepared for the construction of 49 school buildings with 250 classrooms financed through the General Education Improvement Project (GEIP). Moreover, the cost estimate is multiplied by a 0.2 ancillary index, accounting for additional costs associated with ancillary facilities such as water and sanitation facilities as well as teacher rooms and libraries. Finally, the additional investment requirements for classroom construction under the full-day and varied-day configurations are calculated by deducting the existing investment requirements (that is, the status quo requirements under the split-day configuration) from the total investment costs; see Table 8.

192. In the current (status quo) split-day configuration, an estimated US$10.2 million capital investment is required to address the existing classroom shortage of 429; see Table 14. The estimate of the existing classroom shortages assumes that current single-shift schools could also use their classrooms twice a day. If current single-shift schools would continue to run only one shift per day (in a split-day configuration), the estimated investment required to address existing shortages is substantially higher (that is, US$75 million to address a shortage of 3,146 classrooms).

Table 14: Split-day lesson schedule configuration cost estimates for investments required in classroom construction

Split-day Configuration (0.5 CR/C)								
	Schools	(C) Classes	(CR) Classrooms	CR/C Ratio	CR Shortage	Sum of classroom costs (US$)	Ancillary multiplier (US$)	Sum of investment costs (US$)
Single shift	2,869	20,689	17,821	0.5	151	2,999,011	599,802	3,598,813
Double shift	4,463	42,468	29,153	0.5	275	5,461,775	1,092,355	6,554,130
Triple shift	6	114	57	0.5	3	59,583	11,917	71,500
Total	**7,338**	**63,271**	**47,031**	**—**	**429**	**8,520,369**	**1,704,074**	**10,224,443**
					***Existing* Investment Requirement US$10.2 million**			

Source: World Bank staff calculations based on Education Management Information Data 2022–2023.

193. **In a full-day configuration, an estimated US$387.1 million capital investment is required to address a total classroom shortage of 16,240; thus switching to a full-day configuration requires an additional US$376.8 million capital investment; see Table 15.** When each class needs its own classroom for the whole day, 16,240 classrooms will need to be constructed. However, when only two classes (for example, grades 5 and 6) out of six need their own classroom the whole day (CR/C = 0.667), 6,539 classrooms will need to be constructed, and if four out of six classes need their own classroom the whole day (CR/C = 0.833), 14,075 classrooms will need to be constructed.

Table 15: Full-day lesson schedule configuration cost estimates for investments required in classroom construction.

Full-day Configuration (1.0 CR/C)								
	Schools	(C) Classes	(CR) Classrooms	CR/C Ratio	CR Shortage	Sum of classroom costs (US$)	Ancillary multiplier (US$)	Sum of investment costs (US$)
Single shift	2,869	20,689	17,821	1	2,868	56,961,348	11,392,270	68,353,618
Double shift	4,463	42,468	29,153	1	13,315	264,449,215	52,889,843	317,339,058
Triple shift	6	114	57	1	57	1,132,077	226,415	1,358,492
Total	**7,338**	**63,271**	**47,031**	**n/a**	**16,240**	**322,542,640**	**64,508,528**	**387,051,168**
					***Additional* Investment Requirement US$376.8 million**			

Source: World Bank staff calculations based on Education Management Information Data 2022–2023.

Note: n/a = Not applicable or not available.

194. However, when only two classes (for example, grades 5 and 6) out of six need their own classroom the whole day (CR/C = 0.667), 6,539 classrooms will need to be constructed, and if four out of six classes need their own classroom the whole day (CR/C = 0.833), 14,075 classrooms will need to be constructed; see Table 16.

Table 16: Varied-day lesson schedule configuration cost estimates for investments required in classroom construction

Varied-day Configuration (0.667 CR/C)								
	Schools	(C) Classes	(CR) Classrooms	CR/C Ratio	CR Shortage	Sum of classroom costs (US$)	Ancillary multiplier (US$)	Sum of investment costs (US$)
Single shift	2,869	20,567	17,821	0.667	1,445	28,699,145	5,739,829	34,438,974
Double shift	4,463	42,468	29,153	0.667	5,070	100,695,270	20,139,054	120,834,324
Triple shift	6	114	57	0.667	24	476,664	95,333	571,997
Total	**7,338**	**63,149**	**47,031**	**n/a**	**6,539**	**129,871,079**	**25,974,216**	**155,845,295**
					***Additional* Investment Requirement US$145.6 million**			

Varied-day Configuration (0.833 CR/C)								
	Schools	(C) Classes	(CR) Classrooms	CR/C Ratio	CR Shortage	Sum of classroom costs (US$)	Ancillary multiplier (US$)	Sum of investment costs (US$)
Single shift	2,869	20,567	17,821	0.833	2,710	53,823,310	10,764,662	64,587,972
Double shift	4,463	42,468	29,153	0.833	11,319	224,806,659	44,961,332	269,767,991
Triple shift	6	114	57	0.833	46	913,606	182,721	1,096,327
Total	**7,338**	**63,149**	**47,031**	**n/a**	**14,075**	**279,543,575**	**55,908,715**	**335,452,290**
					***Additional* Investment Requirement US$325.2 million**			

Source: World Bank staff calculations based on Education Management Information Data 2022–2023.

Note: n/a = Not applicable or not available.

Human Resources Needs and Recurrent Costs

195. This subsection will calculate the need for additional in-class teaching hours for different policy options and estimate the annual recurrent costs associated with them. Similar to classrooms, there is already a shortage of teachers (and school-level staff) based on the MoEYS' planning (staffing) norms for primary schools (that is, 1.15 teachers per primary school class). However, as discussed in subsection 3.1, the weekly in-class teaching hours allocated to each class (25 hours per teacher × 1.15 teachers per class = 28.75 hours per week) are considerably higher than the intended teaching hours prescribed by the curriculum and school week schedule (19.2 hours per week).

196. Therefore, **estimates of additional teaching hours and teachers depend on how planning and teacher in-class teaching norms are applied.** In this subsection, the existing teacher shortage and associated cost estimates, based on the teachers per class norm, will be calculated separately. Thereafter, the additional need for in-class teaching hours and associated recurrent costs will be calculated for different policy options *under the assumption that the current teacher-to-class ratio (1.05) will be maintained.* This means there are currently 1.05 primary teacher positions per class and estimates of additional costs associated with reforms will assume that this ratio will be maintained.

197. Moreover, the recurrent costs of different policy options depend on *how* the MoEYS will mobilize and finance the additional HR to create more in-class teaching hours. Estimating recurrent costs for additional teaching hours is less straightforward than infrastructure investments, as there are different ways to finance and/or regulate teaching time. Four methods are considered here. First, the MoEYS can *compensate existing teachers* for teaching more hours (in class) per week, similar to some of the existing full-day initiatives, discussed in subsection 5.3, where teachers (and non-teaching staff) are paid a non-salary stipend for *teaching* more hours. Second, the MoEYS can *recruit new teachers* to mobilize additional teaching hours and pay these new teachers according to the existing salary regulations. Third, the MoEYS can *reform (or enforce compliance to) existing staffing norms and teaching regulations, resulting in teachers providing more hours per week without additional pay.* Fourth, the MoEYS could apply a combination of any of the aforementioned three methods (for example, it could enforce compliance of existing teaching norms *and* recruit more teachers).

Human Resource and Salary Spending Data

198. There is no accurate (and up to date) database on all primary school teaching and non-teaching positions (that, is including contract teachers and double-shift positions) at the school level. The EMIS database does not include (accurate) data on contract teachers and double-shift positions. The MoEYS maintained that HRMIS does not specify the position of school-level staff; see Section 2. The structure of the payroll registry, maintained by the MCS, is not aligned with the MoEYS programmatic levels (preschool, primary, lower secondary, and upper secondary), making it difficult to separate primary school teachers (and staff) from other programmatic levels (preschool, primary school, and secondary education). The combined teacher FTE positions can only be identified at the aggregate level (that is, nationwide), as these are reported annually in the education congress reports (based on a consolidation of EMIS data and provincial reports on contract teachers and double-shift positions). This means that distributional inefficiencies (that is, local teacher surpluses and shortages) cannot be considered when estimating teacher needs for different policy options, as it is impossible to quantify the loss due to distributional inefficiency at the school level.

199. Moreover, actual spending on *primary school* teacher salaries cannot be obtained from financial management information systems (FMIS), making it difficult to reliably estimate average costs per teacher position. Actual spending cannot be extracted from the MoEYS-maintained FMIS nor the MEF-maintained FMIS as the budget structure (and expenditure codes) is not aligned with MoEYS' programmatic levels. Thus, MoEYS' FMIS and MEF's FMIS register salary spending for civil servant teachers, contract teachers, overtime (including double shifts), and non-teaching staff, but they do not enable separating primary education spending from secondary or preschool spending.

Cost Estimates of Mobilizing Additional HR

200. **Therefore, the estimate of total primary school teacher salary spending (that is, teacher wage bill) will be based on a weighted estimate of averages across the different contract modalities.** There are 66,585 FTE teacher positions at primary schools—44,905 regular civil servant teachers, 12,425 contract teachers, and 9,255 double-shift positions (that is, additional shifts worked by regular civil servant teachers or other school-level staff); see Table 17. Based on the teacher survey 2024, the average salary of a civil servant teacher is KHR 1.57 million (US$393 [KHR 18.91 million or US$4,728 per year]). This rate is also used for the other non-teaching staff salary estimation. Based on the school survey 2024, the average monthly salary of school directors (without teaching double shift) is KHR 1.76 million (US$440) or KHR 21.1 million (US$5,275) a year. Contract teachers (non-retired teachers) receive 80 percent of the base salary and functional salary of newly recruited teachers for 10 months a year. The average annual cost of a contract teacher is KHR 11.7 million (US$2,925). The cost of a double-shift position is KHR 14.6 million (US$3,650). Double-shift teachers receive 100 percent of the base salary and functional salary of newly recruited teachers (KHR 1.46 million [US$365]) in addition to their salary. Combined, the total teacher salary spending is estimated at KHR 1,129 billion (US$282 million). The weighted average annual cost of a primary teacher FTE is estimated at KHR 17.0 million (US$4,238).

Table 17: Teacher wage bill estimate and number of primary school teaching and non-teaching positions (2023)

	Total number of positions across all primary schools	Average annual costs per position (estimate) KHR, millions	Total annual cost teacher wage bill (estimate) KHR, millions
Civil servant teachers	44,905	18.91	849,154
Contract teachers	12,425	11.66	144,876
Double-shift positions	9,255	14.57	134,845
Subtotal Teacher Positions	66,585		1,128,874
Subtotal non-teaching staff	12,703		
Total school level positions	79,288		

Source: Teaching positions and total non-teaching positions based on Education Congress Report Data (April 2023). Average annual cost per teacher based on 2024 Teacher and School Survey data. Average annual cost of contract teacher and double-shift teacher based on individual salary payment sheets retrieved in 2024.

201. **Moreover, cost estimates for *recruiting new teachers* will be based on the average cost of a teacher FTE as well as the need for additional teacher FTEs under different reform options.** There are currently (2022–2023) on average 1.05 teacher positions per primary school class (66,585 teacher positions and 63,149 classes). Primary classes have been allocated 19.2 intended instruction time hours per week (based on school week schedule, see subsection 3.1), thus one primary teacher FTE is, on average, allocated every 18.2 hours of instruction per week. If the

reforms assume no change in HR norms on teaching per teacher (that is, assuming teaching per teacher will remain unchanged), then teachers are assumed to teach 18.2 hours per week. Total teacher FTEs are calculated by dividing the weekly intended instruction hours per class (of the reformed curriculum) by 18.2 (current teaching per teacher FTE) and multiplied by the number of classes (63,149). Additional recurrent costs are estimated by identifying the additional FTEs required (compared to the current 66,585 baseline) and multiplying them by the annual average cost of a teacher FTE (KHR 17.0 million [US$4,238]).

202. Finally, cost estimates for paying existing teachers to teach more hours per week will be based on examples of stipends paid in existing full-day schooling initiatives; see subsection 5.3. Two examples of full-day school stipends were discussed in subsection 5.3. In *Akhea Mahasei* primary school (School 1), teachers were paid an additional US$120 per month (for 10 month per year) to teach three more (40 minutes) lessons for 5 days per week. In *Kiri Sovanvong* primary school (School 2), all school staff were paid US$175 per month (10 months per year) to teach two more (50 minutes) lessons in a 5-day lesson week. Stipends paid in split-day configurations are 'deduced/ estimated' based on rates paid in *Akhea Mahasei* primary school (School 1), US$40 per month (10 month per year) for teaching one additional lesson (40 minutes) per day (5.75 days per week), and US$50 per month (10 months per year) for switching to a Malaysian model schedule (4.75 hours per day and five lessons per week).[67]

203. The additional recurrent costs of split-day configurations depend on the policy options (that is, methods used for increasing instruction time and mobilizing additional HR) and vary from US$26.6 million to US$67.7 million; see Table 18.

(a) The current curriculum provides 728 intended instruction hours per year at an estimated recurrent cost of US$282.2 million for teacher salaries.

(b) The first split-day reform option, adding a single (40 minutes) lesson each day, would increase instruction time by 20 percent (874 hours) and would increase salary spending by 9 percent (US$26.6 million) if existing teachers are paid US$40 monthly stipends, or 20 percent (US$56.7 million) if additional teaching is mobilized by newly recruited teachers.

(c) The second split-day reform option, replicating the 'Malaysian model', would increase instruction time by 24 percent (903 hours) and would increase salary spending by 12 percent (US$33.3 million) if existing teachers are paid US$50 monthly stipends, or 24 percent (US$67.7 million) if additional teaching is mobilized by newly recruited teachers.

204. However, if HR reforms would result in more weekly teaching per teacher, this would significantly reduce the costs of these options. HR reforms could (theoretically) result in no additional costs or even costs savings if weekly instruction time per teacher could be increased to 23.75 hours or more.

[67] The US$40 and US$50 might overestimate costs as teachers can still teach in the afternoon (private tutoring) unlike in the *Akhea Mahasei* primary school (School 1).

Table 18: Split-day lesson schedule configuration cost estimates for additional HR recurrent costs

Split-day configurations	Teaching per Teacher (Weekly)	Teaching per Class (Weekly)	Total FTEs required	Additional FTEs	Additional Recurrent Costs (US$ millions)	Annual Instruction Time	Instruction Time Gain	Primary Teacher Salary spending increase	Cost per additional Instruction Hour
1a. Current Week Schedule									
No change	18.2	19.2	66,585	-	-	728	0%	0%	-
1b. Add 1 morning lesson (40 minutes)									
Teachers (all FTEs) are paid US$40 for 10 months per year	21.8	23	66,585	-	26.6	874	20%	9%	182,842
No reforms - shortage filled with new teachers	18.2	23	79,958	13,373	56.7	874	20%	20%	388,063
Teacher reforms - teachers teach 25 hours (both morning and afternoon) and remainder filled with new teachers	25	23	58,209	-8,376	-35.5	874	20%	-13%	-
1c. Malaysian Model									
Teachers (all FTEs) are paid US$50 for 10 months per year	22.5	23.8	66,585	-	33.3	903	24%	12%	191,153
No reforms - shortage filled with new teachers	18.2	23.8	82,565	15,980	67.7	903	24%	24%	388,063
Teacher reforms - teachers teach 25 hours (both morning and afternoon) and remainder filled with new teachers	25	23.8	60,107	-6,478	-27.5	903	24%	-10%	-

Source: World Bank staff calculations based on Education Management Information Data 2022–2023 and estimates of (a) average annual cost per teacher based on 2024 Teacher and School Survey data and (b) average annual cost of contract teacher and double-shift teacher based on individual salary payment sheets retrieved in 2024.

205. The additional recurrent costs of full-day configurations depend on the policy options (that is, methods used for increasing instruction time and mobilizing additional HR) and vary from US$79.9 million to US$159.8 million; see Table 19.

(a) The first full-day reform option, adding three (40 minutes) lessons on 5 lesson days, would increase instruction time by 52 percent (1,108 hours) and would increase salary spending by 27 percent (US$79.9 million) if existing teachers are paid US$120 monthly stipends, or 52 percent (US$147.6 million) if additional teaching is mobilized by newly recruited teachers.

(b) The second full-day reform option, adding two (50 minutes) lessons and switching to a 5-day lesson week would increase instruction time by 30 percent (950 hours) and would increase salary spending by 49 percent (US$138.8 million) if existing school-level staff are paid US$175 monthly stipends, or 31 percent (US$86.1 million) if additional teaching is mobilized by newly recruited teachers.

(c) The third full-day reform option, replicating the 'Thai model', would increase instruction time by 57 percent (1,140 hours) and would increase salary spending by 57 percent (US$159.8 million) if additional teaching is mobilized by newly recruited teachers.

206. **However, if HR reforms would result in more weekly teaching per teacher, this would significantly reduce the costs of these options.** For example, HR reforms could (theoretically) decrease the additional recurrent costs of the Thai model from US$159.8 million to US$39.6 million if instruction time per teacher would be increased to 25 hours per week. Even if instruction hours per teacher per week increase only slightly (for example, 1 or 2 hours), this would considerably reduce costs.

Table 19: Full-day lesson schedule configuration cost estimates for additional HR recurrent costs

Full-day configurations	Teaching per Teacher (Weekly)	Teaching per Class (Weekly)	Total FTEs required	Additional FTEs	Additional Recurrent Costs (US$ millions)	Annual Instruction Time	Instruction Time Gain	Primary Teacher Salary spending increase	Cost per additional annual Instruction Hour
2a. Add 3 afternoon lessons (40 minutes) on 5 days only									
Teachers (all FTEs) are paid US$120 for 10 months per year	27.7	29.2	66,585	-	79.9	1,108	52%	27%	210,268
No HR management reforms: shortage filled with new teachers	18.2	29.2	101,407	34,822	147.6	1,108	52%	52%	388,063
HR management reforms: Teachers teach 25 hours per week (both morning and afternoon) and remaining shortage is filled with new teachers	25	29.2	73,825	7,240	30.7	1,108	52%	11%	80,750

Full-day configurations	Teaching per Teacher (Weekly)	Teaching per Class (Weekly)	Total FTEs required	Additional FTEs	Additional Recurrent Costs (US$ millions)	Annual Instruction Time	Instruction Time Gain	Primary Teacher Salary spending increase	Cost per additional annual Instruction Hour
2b. Add 2 afternoon lesson (50 minutes) but reduce to 5 days									
All school-level staff are paid US$175 for 10 months per year.	23.7	25	66,585	-	138.8	950	30%	49%	625,018
No reforms - shortage filled with new teachers	18.2	25	86,911	20,326	86.1	950	30%	31%	388,063
Teacher reforms - teachers teach 25 hours (both morning and afternoon) and remainder filled with new teachers	25	25	63,271	(3,314)	(14.0)	950	30%	-5%	-
2c. Thai Model									
No reforms - shortage filled with new teachers	18.2	30	104,293	37,708	159.8	1,140	57%	57%	388,063
Teacher reforms - teachers teach 25 hours (both morning and afternoon) and remainder filled with new teachers	25	30	75,925	9,340	39.6	1,140	57%	14%	96,088

Source: World Bank staff calculations based on Education Management Information Data 2022–2023 and estimates of (a) average annual cost per teacher based on 2024 Teacher and School Survey data and (b) average annual cost of contract teacher and double-shift teacher based on individual salary payment sheets retrieved in 2024.

7.5 Priority Recommendations

Priority Recommendation 1:	Timeline			Implementation			Responsible Agency		
Adopt a long-term and iterative approach to instruction time reforms	**Short-Term**	**Medium-Term**	**Long-Term**	**Technical Complexity**	**Financial Cost**	**Implementation Sensitivity**	**MoEYS**	**MCS**	**Other**
Pilot instruction time reform options and robustly measure their impact on student learning – while continuing to invest in moderating factors – education practices with a proven track record to boost student learning – to ensure the efficacy of the instruction time reforms.	√	√		+++	++	+	√	√	MEF
Ensure cost-effectiveness – by including low-cost reform options (to increase instruction time) into the piloting phase – as reforms typically yield modest results.	√	√		+++	+	++	√		
Clearly identify the objectives and the target groups of instruction time reforms – to inform the design of a policy intervention – and promote equity and equal education opportunities.	√			+++	+	+++	√		
Priority Recommendation 2:	**Timeline**			**Implementation**			**Responsible Agency**		
Combine investments in additional instruction time with measures to reduce instruction time loss	**Short-Term**	**Medium-Term**	**Long-Term**	**Technical Complexity**	**Financial Cost**	**Implementation Sensitivity**	**MoEYS**	**MCS**	**Other**

Conduct a study to quantify instruction time loss and identify the underlying causes and potential measures to address teacher absenteeism, tardiness and unofficial school closures.	√			++	+	++	√	√	
Reduce unofficial school closures as well as teacher absenteeism and tardiness.	√	√		++	+	++	√	√	Schools
Combine methods of increasing instruction time (additional hours, weeks, and addressing loss) as policy reforms options should be applied in tandem.	√	√		+++	+	+	√		
Priority Recommendation 3:	**Timeline**			**Implementation**			**Responsible Agency**		
Revise *and enforce* teacher HR regulations	**Short-Term**	**Medium-Term**	**Long-Term**	**Technical Complexity**	**Financial Cost**	**Implementation Sensitivity**	**MoEYS**	**MCS**	**Other**
Clarify the curriculum (hours/lessons per week), teaching norms, and HR regulations, and more strictly enforce compliance.	√	√		+++	+	+++	√	√	
Adjust teacher HR management regulations, to increase the number of in-class teaching hours per teacher (in order to limit the costs of instruction time reforms) through:	√	√	√	+++	+	+++	√	√	
• Introducing a new school lesson schedule (and teaching norm) that requires teachers to teach more hours per week (or per year) without additional pay and enforcing compliance of *all* teachers to this new framework, and/or:	√	√		+++	+	+++	√	√	

	Timeline			Implementation			Responsible Agency		
• Compensating teachers for teaching more, but phase out the additional recurrent costs by limiting salary adjustment in the following years, and/or:	Short-Term	Medium-Term	Long-Term	Technical Complexity	Financial Cost	Implementation Sensitivity	MoEYS	MCS	Other	MEF
	√	√	√	+++	++	++	√	√		√
Address the very high prevalence of teacher secondary jobs (in the long term), as this is a key impediment to increasing the teaching per teacher norm.	√	√	√	++	+	+++	√	√		
Additional Recommendations:	**Timeline**			**Implementation**			**Responsible Agency**			
Strengthen data management and testing practices to develop a more robust knowledge foundation for decision-making and policy development.	√	√		+++	++	+	√	√		