



Teaching Quality in Cambodia's Primary Education

Toward Incentivizing Effort, Performance, and Quality Assurance

Main Report March 2025



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Abbreviations

ASEAN	Association of Southeast Asian Nations	NGO	Nongovernmental Organization
CPD	Continuous Professional Development	NIE	National Institute of Education
СРОМО	Continuous Professional Development Management Office	NLA	National Learning Assessment
СРІ	Consumer Price Index	OECD	Organisation for Economic Co- operation and Development
DEA	Department of Exam Affairs	PASA	Programmatic Advisory Services and Analytics
DEO	District Education Office	PCK	Pedagogical Content Knowledge
DP	Development Partner	PEO	Provincial Education Office
DSA	Daily Subsistence Allowance	PhD	Doctor of Philosophy
EGL	Early Grade Learning	PLC	Professional Learning Community
EMIS	Education Management Information System	PTTC	Provincial Teacher Training Center
FTE	Full-Time Equivalent	RTTC	Regional Teacher Training Center
GDP	Gross Domestic Product	RUPP	Royal University of Phnom Penh
GPI	Gender Parity Index	SEA-PLM	Southeast Asia Primary Learning Metrics
HR	Human Resources	SMC	School Management Committee
HRCPD	Human Resource Continuous Professional Development	SSC	School Supporting Committee
HRMIS	Human Resources Management Information System	ТСР	Teacher Career Pathway
ICT	Information and Communication Technology	TEC	Teacher Education College
ILO	International Labour Organization	TEI	Teacher Education Institution
INSET	In-Service Education and Training	TIMSS	Trends in International Mathematics and Science Study
IRT	Item Response Theory	TPAP	Teacher Policy Action Plan
LCD	Liquid Crystal Display	TTD	Department of Teacher Training
MCS	Ministry of Civil Service	тті	Teacher Training Institution
MEF	Ministry of Economy and Finance	UIS	UNESCO Institute for Statistics
MoEYS	Ministry of Education, Youth, and Sport	UNESCO	United Nations Educational, Scientific and Cultural Organization
моос	Massive Open Online Course	USAID	United States Agency for International Development
NER	Net Enrollment Rate		

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 quality of teachers and the potential impediments of short school days in primary education. Limited gains in student learning outcomes have raised concerns about the quality of primary education in Cambodia and the efficacy of reforms and investment in teaching quality. Since 2012, the Government of Cambodia has invested significantly in improving teacher pay and adopted a number of policies, plans, and frameworks to improve the quality of teachers. However, the extent to which these reforms have succeeded in improving teaching quality remains unclear.
- 2. The main aim of this study is to explore the effectiveness of the remuneration and teacher policy reforms in improving teaching quality. This includes an assessment of the attractiveness of the teaching profession, a review of teacher qualifications, and the investments in teacher capacity building as mandated by the Teacher Policy Action Plan (TPAP), as well as an assessment of teacher performance on effort, competencies, and classroom practices. This study aims to identify the progress made, in light of the teacher reforms of the past decade, and the additional reforms that could be implemented to improve teaching quality to strengthen student learning outcomes.¹ 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. An extensive range of education practitioners and sector experts were interviewed on various 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.
- 3. In the 2022–2023 school year, 66,585 teacher positions across the 7,338 public primary schools in Cambodia were filled.² These were (a) 44,905 'regular' civil servant teacher positions, (or 67 percent of total teacher positions); (b) 12,425 contract teacher positions (19 percent); and (c) 9,255 so-called 'double-shift' teacher positions (14 percent), that is, a civil servant working an additional shift on top of her/his regular teaching or non-teaching position. In addition, there were 12,703 non-teaching positions (for example, principals, deputies, secretaries, and librarians). Due to the decline in double-shift positions (and increase in contract teachers), the teacher workforce composition has changed significantly in the past decade, and classes taught by teachers working two shifts have halved since 2015.
- 4. The percentage of classes taught by female teachers has risen significantly over the past decade, from 46 percent in 2014 to 60 percent in 2023. However, in 2023, only 18 percent of school managers were female (and this has barely improved since 2015). Moreover, the age distribution of the teacher workforce has evolved significantly; in 2023, there were more older

This study on teaching quality in Cambodia's primary education was conducted in parallel with a study on teaching quantity 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, *Instruction Time and Student Learning - Can Cambodia improve Learning Outcomes by Introducing Full-day Lesson Schedules in Primary Schools?* (2025), for more detailed discussion on teaching quantity, including the relation between instruction time and student learning, instruction time in primary schools, and Cambodia's policy options to increase instruction time. Both studies were conducted as part of the World Bank's education programmatic advisory services and analytics (PASA) and initiated upon the request of the Ministry of Education, Youth, and Sport (MoEYS) and the Ministry of Economy and Finance (MEF).

² Education Congress Report 2023, MoEYS (2023).

teachers (ages 48 and older) and fewer younger teachers (ages 22 or younger). Staff attrition was on average 1.7 percent between 2013 and 2023, according to MoEYS data. However, alternative calculation methods suggest it could have been as high as 4 percent, and the rate is expected to increase significantly in the coming years. By 2033, one-third (33 percent) of the *civil servant teachers* are expected to retire or leave, and one-third (33 percent) of the *total teacher positions* are filled by temporary contracts (contract and double-shift positions).

- 5. From 2013 to 2019, the salaries of public school teachers have been raised significantly, turning a public school teacher wage penalty in 2012 into a wage premium in 2019. In 2012, public primary school teachers earned less than their private sector peers, teachers were typically working second jobs to substitute their incomes, and low teacher pay was considered a key impediment to attracting high-caliber graduates to the teaching profession. In 2019, Cambodian public school teachers earned 27 percent more than their peers in the private sector, and the median salary of a primary school teacher (KHR 1,381,350 [US\$345]) significantly exceeded the median wage of other 'professionals' (KHR 1,290,000 [US\$323]). Total MoEYS spending rose from 1.8 percent of gross domestic product (GDP) in 2013 to 3.3 percent in 2019, primarily driven by higher spending on salaries
- 6. The (starting) salary of a primary school teacher rose from KHR 310,800 (US\$78) in 2013 to KHR 1,400,000 (US\$350) in 2023, a 350 percent increase over 10 years. Even when correcting for inflation, primary teacher salaries still gained 237 percent. Since 2012, the MoEYS has also improved salary payment processes and in 2024 all teachers reported receiving their salaries through bank transfers, reducing delays and leakage. Furthermore, the 2024 survey data also suggest that compliance with salary regulations is strong. However, the compensation reforms also resulted in considerable wage compression, reducing the differences between primary, lower-secondary, and upper-secondary teachers and within grades (for example, between junior and senior primary teachers). Moreover, teacher incentives, such as the 'disadvantaged/relocation allowance', have not been raised on par with base salaries, declining their overall share in takehome salary and reducing their strength to incentivize teacher behavior.
- 7. The attractiveness of the teaching profession appears to have improved considerably since 2013 and the teacher remunerations reforms. From 2013 to 2015, the annual number of primary teacher training applicants averaged almost 22,000, whereas the following years (2016 to 2023) it averaged almost 39,000, a 78 percent increase. However, the number of applicants per teacher vacancy varies and was lower in remote provinces. One proxy indicator for the attractiveness of the primary school teaching profession is the relative quality of upper-secondary graduates enrolled in Provincial Teacher Training Centers (PTTCs), expressed in their final grade 12 national exam score. Data on PTTC trainees and final grade 12 national exam scores suggest a considerable improvement in the caliber (that is, academic achievements) of PTTC trainees. During 2014 to 2024, more than half (53 percent) of the PTTC-enrolled trainees were among the top 10 percent highest-scoring students sitting for the final grade 12 national exam, and 33 percent were among the top 5 percent, a dramatic improvement in the PTTC trainee caliber compared to 2012. And, in 2024, the average national percentile rank nationwide was 91 and varied from 82 in the remote northern provinces to 98 in Phnom Penh and 99 in Kep.
- 8. In addition to improvements in the number and academic achievements of teacher applicants, teachers themselves also report being more satisfied with their careers in 2024 compared to 2012. Teachers' concerns over low pay decreased significantly, compared to 2012, and concerns over excessive workload also declined. However, less than half the teachers (48 percent) believed

- their salaries were sufficient to 'live a good life and support their families'. Teachers typically consider teaching a calling and do not identify improved pay rates as their primary motivation for joining the teaching profession.
- Earning income through additional work (outside of their regular teaching jobs) continues to be common for primary school teachers, only one out of six (16 percent) teachers reported not having any additional income in 2024. Primary school teachers typically work an additional 18 hours per week (=median) besides their regular teaching job, earning a total of KHR 730,000 (US\$183 [=median]). Self-reported private tutoring almost doubled between 2012 and 2024, from 18 percent to 34 percent, while double-shift teaching declined considerably, and non-teaching jobs declined somewhat. Private tutoring and additional work at private schools are more common in urban areas, whereas teachers in rural and disadvantaged areas more often report non-teaching jobs (and double shifts). Female teachers more often report generating income from private tutoring (38 percent) and teaching at private schools (6 percent) compared to male teachers (28 percent and 3 percent, respectively). Average reported hourly income for additional work varies considerably across secondary jobs, with double-shift income the highest (KHR 15,256 [US\$3.8] per hour) and private school teaching income the lowest (KHR 8,390 per hour). Average additional monthly income from private tutoring has increased from KHR 198,000 in 2012 to KHR 485,000 in 2024, a 145 percent increase, and urban teachers report almost double the private tutoring income compared to teachers in rural and disadvantaged areas.
- 10. Primary teacher qualifications (that is, grade 12 and post-secondary completion rates) have improved considerably since 2015. In 2023, 79 percent of civil servant primary school teachers held a 'grade 12 certificate' and 22 percent held a (non-teacher training) 'post-secondary degree', compared to 63 percent and 5 percent, respectively, in 2015. This increase in grade 12 completion rates can be largely attributed to attrition and replacement and will continue to improve in the coming decade. Grade 12 completion rates vary somewhat across Cambodia's provinces (typically between 70 to 90 percent). However, these provincial disparities have declined since 2015 and will continue to decline in the coming years. As attrition is the primary driver of improvements in upper-secondary completion rates of civil servant primary school teachers, it is key that all provinces succeed in attracting new teacher grade 12 certificates. Conversely, the sizable increase in (non-teacher training) post-secondary degree completion rates should be (largely) attributed to in-service 'upgrading' of teachers' education qualifications. There is more variation in post-secondary degree rates of primary school teachers across provinces and disparities are increasing.
- 11. Almost two-thirds (64 percent) of civil servant primary school teachers are qualified according to the current qualification standards (known as '12+2', a grade 12 certificate plus a 2-year pedagogic degree), according to the 2024 survey data. Teacher age is an important moderator that needs to be considered when reviewing disparities in qualifications across gender, contract modalities, and teacher location (that is, urban, rural, and disadvantaged). Contract teachers are somewhat unique in the teacher workforce in terms of pedagogic qualifications, as 90 percent of contract teachers did not receive *any* formal (1- or 2-year) pedagogic training. Double-shift teachers have (on average) higher education qualifications than their single-shift colleagues. Gender and location disparities in terms of education qualifications are fairly small and moderated by teacher age (that is, male and urban teachers are older and more often slightly underqualified).
- 12. The MoEYS has established a series of policies and frameworks related to teacher continuous professional development (CPD), as part of its 2015 TPAP commitment to upgrading teacher qualifications and knowledge. In 2018, the MoEYS adopted the *Teacher Career Pathways Policy*,

which establishes a framework for different teacher career tracks. In the teaching track, teachers who meet the necessary criteria can advance from 'Teacher' to 'Senior Teacher'. Some may further progress to the roles of 'Lead Teacher' and eventually 'Master Teacher'. However, teachers surveyed in 2024 were often unaware of the (teacher) career pathways and very few reported participating in it. Moreover, nearly half of the teachers had not heard of the Khmer CPD term (ការ អភិវឌ្ឍវិជ្ជាជីវៈជាប្រចាំ) despite most, if not all, engaging in some form of CPD activities.

- 13. Four out of five (82 percent) primary school teachers have attended at least one in-service training (INSET) course since becoming teachers. However, training opportunities have not been distributed equally. Teachers in disadvantaged schools reported receiving more INSET courses (on average 1.87 per teacher) compared to their urban and rural colleagues (1.14 and 1.48, respectively). Most INSET courses are perceived to be provided by the MoEYS (or its provincial education offices [PEOs] and district education offices [DEOs]). The topics of INSET courses have evolved over time; INSET courses on early-grade reading, gender-based violence, and early-grade math have been more commonly attended in the past 5 years. Teachers generally have a positive view of the training provided, with 90 percent considering it useful. However, few teachers believe that attending INSET courses is linked to their career progression. School principals indicate that INSET courses on early grade learning have the highest priority for their teachers, followed by information and communication technology (ICT) skills for teaching, school management, and student assessment.
- 14. In addition to INSET courses at schools or cluster schools, the CPD Framework also calls for on-site (school-based) CPD, including teacher technical meetings (on Thursday), mentoring and the creation of professional learning communities (PLCs). Teachers surveyed in 2024 reported attending Thursday meetings on average seven times year, and typically meetings discussed teaching methodology. However, teachers generally perceived Thursday meetings as less useful and less engaging than INSET courses. On-site CPD includes mentoring programs at schools; however, most teachers surveyed in 2024 had not heard of this program and only one out of six reported participating in it. PLCs appear to be almost nonexistent, as most teachers and the majority of school principals have never heard of it. Finally, teacher self-directed CPD activities include various individual learning activities that are not necessarily pursued at accredited CPD providers. More than 30 percent of teachers obtained higher degrees after becoming teachers, and 9 percent were enrolled in degree programs at the time of the 2024 survey. Moreover, nearly 30 percent of contract teachers were enrolled in degree programs.
- 15. An analysis of primary teacher math test scores, completed by 725 teachers as part of the 2024 survey, did not demonstrate a significant improvement in math competencies compared to 2012. The teacher math test consisted of items at different difficulty levels (grades 6, 8, and 9) retrieved from the Cambodian national learning assessment (NLA) as well as items combining content and pedagogical elements. Teachers' test results should be interpreted with great caution, however, as there are many methodological challenges to accurately testing teacher competencies. Teachers are notoriously difficult to test, as many teachers are highly reluctant to take tests, and the 2012 and 2024 teacher test results differ considerably in terms of response rates.
- 16. Younger teachers in the 2024 survey performed significantly better than older teachers. Younger teachers outperformed older teachers on all test components, especially on items at grade 8 (Trends in International Mathematics and Science Study [TIMSS]) and grade 9 difficulty level. This pattern suggests that primary school teachers largely retain their grade 6 math and pedagogic skills, as they practice them daily, whereas their grades 8 and 9 math skills decline rapidly after leaving secondary school (and becoming a teacher). Younger teachers performed significantly

better than grade 6 students (on grade 6 difficulty level items) but similar to grade 9 students (on grade 9 difficulty level items). However, in 2024, younger teachers (ages 29 and under) did not demonstrate a significant improvement in math skills compared to 2012. In 2024, teachers scored higher on pedagogic items but lower on grade 6 content items, compared to 2012. Remarkably, teachers' test scores in 2024 did not significantly vary across school locations (urban, rural, or disadvantaged) or teacher gender. However, double-shift teachers performed significantly better than their regular civil servant and contract teacher peers.

- 17. Student attendance rates observed in classes rose from 82 percent in 2012 to 87 percent in 2024. The average *number* of students attending per class is considerably higher for urban primary schools than for rural and disadvantaged schools. Textbook availability for students has more than doubled since 2012, but in 2024 there are still fewer textbooks than students.
- 18. Classroom observation data from the 2012 and 2024 surveys suggest that remarkably little has changed in terms of the method of instruction and classroom practices. Rarely did the 2024 classroom assessment classify classroom activities as 'students asking questions' (only 1 percent of the time) and 'students practicing' (2 percent of the time), and this observed pattern was similar in 2012. In 2024, teachers posed fewer questions that required collective responses but more questions that encouraged imaginative or creative thinking, compared to 2012. Between 2012 and 2024, there were subtle changes in how teachers provided feedback to students. The practice of teachers copying lessons from textbooks onto the blackboard and writing questions for students to copy has declined significantly. Using Stallings observation categories, the data from the classroom observations show little variation between 2012 and 2024 as well as across school location, teacher age, teacher gender, and contract modality
- 19. Although most teachers have access to electricity and the internet, very few use ICT for teaching purposes. In the 2024 survey, almost all (95 percent) teachers reported having ('always' or 'almost always') access to electricity at school, and 88 percent reported having ('always' or almost 'always') access to the internet. ICT equipment is usually available but often exclusively used for school management and typically not available for teaching. Around 93 percent of teachers reported never using a computer (for teaching purposes), and 95 percent indicated they never used MS Office in class. Almost one-quarter (24 percent) of teachers indicated using the internet in teaching. The most common digital device used for teaching is a mobile (smart) phone; 35 percent of teachers indicated using it in class.
- 20. Only 7 percent of the teachers surveyed in 2024 indicated they were confident they had 'the required skills' to use a computer for teaching, while another 46 percent said they had 'some skills but needed further training'. Moreover, 74 percent reported never using email, and only 6 percent reported using it at least once a week. Telegram is widely used for communication in Cambodia, including among teachers. Younger teachers are more confident they 'have some skills' for using ICT in teaching and are more likely to use computers in their teaching.
- 21. In 2018, the MoEYS adopted the Policy on Inclusive Education; since then, some progress has been made in providing inclusive education training to primary school teachers. However, most teachers report (still) not having received any (pre-service or in-service) training on inclusive education. Younger teacher cohorts have received more pre-service training on inclusive education than older cohorts. Furthermore, only 1 percent of teachers feel 'confident they have the required skills' to teach students with special needs, and two out of three teachers feel they

'lack the required skills'. Only 8 percent of teachers reported having access to documents related to inclusive education, whereas 25 percent of teachers reported having students with disabilities in their classes. While there is strong support for the right to education for students with special needs, there are noticeable concerns among teachers regarding the effectiveness and negative impact of inclusive education on mainstream classrooms. Teachers are divided on the effectiveness of regular classrooms for students with mild to moderate disabilities and are concerned about the impact of inclusive education on teaching effectiveness.

22. Teacher awareness of the teacher professional standards increased significantly between 2012 and 2024. However, it is unclear how much teachers know and understand these standards. Most school principals are aware of the professional teacher standards, and 16 percent received (some) training on them, but very few principals (3 percent) were able to accurately recall the number of standards or name any of them.

Table 1: Overview of key findings by section

Section	Key Findings
Teacher Workforce Composition	The share of temporary teachers is expanding, and higher turnover of civil servant teachers is expected, with implications for policy and teacher training needs.
Teacher Remuneration	Teacher pay has improved considerably, resulting in a wage premium for public primary school teachers but also wage compression, reducing the strength of incentives.
Attractiveness of the Profession	More high school graduates are applying for primary teacher training, high-caliber graduates are entering teacher training, and teachers report higher job satisfaction.
Teacher Secondary Jobs	84 percent of teachers report earning income through teaching and non-teaching secondary jobs, impeding in-class and outside-of-class teacher efforts.
Teacher Qualifications	Almost all younger teachers now have a grade 12 certificate and 2 years of pedagogic training; the rate of bachelor's degrees is also rising.
Continuous Professional Development	An expansive CPD framework has been developed but not all components are adequately funded and some have not been effectively implemented.
Teacher Math Tests	Younger teachers did not perform significantly better in 2024 compared to 2012, raising concerns over the quality of teacher preparation.
Classroom Observations	Classroom teaching practices have changed remarkably little since 2012, raising concerns over the efficacy of curriculum reforms in pre-service training.
Teaching Practices	Only a fraction of teachers claim to use ICT in teaching, and only a fraction report having the skills, diagnostic, and teaching materials for inclusive education.

Recommendations

23. Based on these findings, this study recommends that the MoEYS and Ministry of Civil Service (MCS) should revise the policy on 'temporary teacher contract modalities'—including contract teachers and double-shift teaching positions—and consider it primarily a short-term policy option. Findings of this study suggest that the assumptions underlying the policy to mobilize temporary contracted teachers no longer apply in 2024. The MoEYS needs to revise and clarify why it needs temporarily contracted teachers, where these teachers should be prioritized, and what pre-service training and selection criteria apply to these teachers.

- 24. The MoEYS and MCS should introduce multiyear (for example, 3-year) contracts for contract teachers and consider the trade-offs associated with mobilizing contract teachers. The current 10-month contracts for contract teachers cause delays in mobilizing them, as they cannot be trained during the 2-month leave period before starting the school year. Moreover, while there are benefits associated with this modality (lower costs, higher effort), international lessons learned suggest these are not sustainable and its use is not recommended for medium- to long-term education policy. Studies on the use of contract teachers highlight the need for a standardized and rigorous selection process, comprehensive information (on contract teachers), quality assurance guidelines and a protocol for training, support for contract teacher preparedness for classroom practice, and rationalized salaries including opportunities to regularize into the civil service.
- 25. Furthermore, the MoEYS and MCS should (continue to) fully phase out double-shift teaching positions and fast-track female school leaders. Double-shift teaching positions are considerably more expensive than contract teachers and are (presumably) less effective. Double shift teaching positions create perverse incentives and increase vulnerabilities to abuse. The MoEYS should consider fast-tracking female school principals to address the comparatively low female representation in school management.
- 26. The MoEYS should anticipate considerably higher turnover in the civil servant teacher workforce in the coming decade, which has implications for pre-service teacher training needs as well as the potential for introducing (unpopular) teacher reforms. Only 45 percent of the (future) workforce in 2033 will already have received pre-service training in 2023, and 55 percent has not yet been through pre-service training. The MoEYS and MCS could decide to use the expected higher turnover to adjust the composition of the teacher workforce and increase the share of temporarily contracted teachers.
- 27. The MoEYS and MCS should decompress teacher pay, based on a critical review of the MoEYS' current strategic objectives and the requirements to incentivize teacher behavior. Moreover, the MoEYS, working with Cambodia's teacher associations, needs to develop a long-term teacher remuneration strategy to increase the weekly work hours primary school teachers work for their primary teaching jobs (and reduce the prevalence of primary school teachers earning additional income through secondary jobs) and include this into any future consideration on salary or allowance adjustments.
- 28. The MoEYS should open up the pre-service pedagogic training facilities to contract teachers (if they need additional pedagogic training) as well as other trainees who have not been appointed to civil service positions. Restricting pedagogic training programs (and certificates) to civil service appointed trainees creates inefficiencies and perverse incentives. The MoEYS should also reevaluate the need to provide scholarships/stipends to pre-service teacher trainees. Moreover, the MoEYS should prepare for larger cohorts of pre-service teacher trainees, especially if the MoEYS decides to provide more extensive pedagogic training to contract teacher. Now that most new (civil servant) primary teachers meet the minimum qualification criteria, the MoEYS should shift its focus to ensuring the quality of pedagogic degree programs and graduate teacher trainees. Instead of the current entry test, the *final exams* of the pedagogic degree program should be used to select qualified candidates and ensure the quality of newly trained teachers.
- 29. More broadly, the MoEYS should consider easing entry restrictions into the teacher workforce and introduce a *teacher licensing system* that enables professionals with university degrees

- **to become teachers.** A teacher licensing system would provide much-needed flexibility to Cambodia's teacher labor market, and it would optimize the time and cost efficiency of pre-service training. The MoEYS could develop a licensing system with criteria for admission into the teacher workforce, based on best practices in the East Asian region.
- **30.** The MoEYS should consider international lessons learned on the CPD elements critical to boost student learning. Studies and impact evaluations on teacher professional development programs have identified several CPD elements that are critical to promote student learning, including (a) having a specific subject focus, (b) incorporating lesson enactment into the training, (c) having an initial face-to-face component, and (d) having follow-up visits (or some kind of coaching) to help teachers transition skills from training to their day-to-day practice. Furthermore, an evaluation of World Bank projects supporting teacher development underlined the importance of embedding programs into the education system, the availability of strong instructional leadership, and the scaling-up in terms of coverage as well as depth to promote sustainability.
- 31. The MoEYS should review existing CPD policies, build consensus around the financing and implementation of a single CPD framework, and raise awareness among teachers and school managers. Moreover, the MoEYS should reduce the fragmentation of CPD responsibilities across its departments. The MoEYS should strengthen its stewardship role in donor-funded CPD, by ensuring that INSET course content boosts student learning, is aligned with its strategies, and links to the teacher career pathways. The MoEYS should invest in on-site teacher mentoring and coaching, and it should regulate the Thursday technical meetings by developing guidelines or a curriculum and provide external coaches to support pedagogic development of teachers. The MoEYS should fully leverage the desire of primary school teachers to upgrade their academic qualifications and obtain bachelor's degrees, by facilitating or incentivizing degree programs relevant and beneficial for education quality.
- **32.** Moreover, the MoEYS should develop a realistic and fiscally affordable ICT strategy for primary schools and ensure integration of inclusive education into pre- and in-service training modalities.

 An ICT strategy should identify the ICT infrastructure the government can afford to procure and maintain for primary schools and the ICT skills students should acquire at the end of grade 6. The MoEYS should leverage existing ICT skills and infrastructure by developing mobile-friendly digital teaching materials. The MoEYS should also ensure effective integration of an inclusive education model in pre-service primary teacher training and aim to provide INSET to teachers who have not yet received it (INSET or pre-service training).
- 33. 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 human resources (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 collect more detailed data on teacher training applicants and trainees (to assess the caliber of applicants and the attractiveness of the profession) and on attrition (to better forecast teacher training needs). It should more extensively test teacher trainees (at entry and exit) and analyze test results to assess the performance of training facilities and the impact of different degree programs. 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 2023.³ The progress made in the post-primary levels during this period was even more impressive, with the NER increasing almost fourfold, from 17 to 65 percent for lower-secondary education and from 8 to 44 percent for upper-secondary education. Additionally, Cambodia has achieved gender parity in access to education at the primary level, with a gender parity index (GPI) of 1.0 in the NER during 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 Sports (MoEYS) during this period, show persistently low scores in literacy and numeracy tests; see Table 2. 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 responded correctly, on average 46 percent for Khmer and 43 percent for math, whereas in 2016 this increased to 52 percent for Khmer and 48 percent for math. In 2021, there was a decline in percentage of correct answers for Khmer (47 percent) and math (38 percent), resulting from 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.

Table 2: NLA scores for Khmer and math, grade 6 (2013, 2016, 2021) and grade 8 (2014, 2017, 2022)

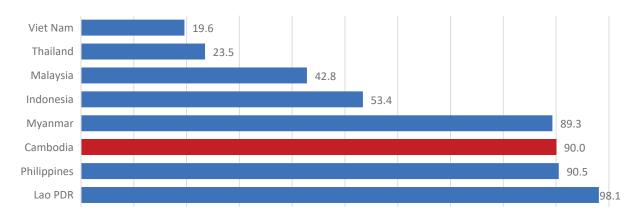
		Grade 6			Grade 8			
		Years Assessed	2013	2016	2021	2014	2017	2022
Khmer	Percentage correct	46	52	47	56	54	54	
	knmer	Scaled score	504	493	455	500	495	488
Subjects Mathematic	Mathamatica	Percentage correct	43	48	38	44	47	43
	Matnematics	Scaled score	489	493	422	500	494	473

Source: MoEYS Education Quality Assurance Directorate's 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 the passage. In terms of learning poverty, Cambodia ranked similar to Myanmar and the Philippines and performed better than Lao People's Democratic Republic. However, learning poverty rates are much lower in other Southeast Asian countries, including Viet Nam, Thailand, Malaysia, and Indonesia; see Figure 1.

³ United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics (UIS) data, retrieved October 2024.

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



Sources: (a) Southeast Asia Primary Learning Metrics (SEA-PLM) 2019 for Lao PDR, the 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 quality of primary education in Cambodia and the efficacy of reforms and investment in teaching quality. In 2012, teacher pay was considered to be too low and a key impediment to attracting high-caliber candidates to the teacher workforce. Teachers also often needed to substitute their incomes by working additional jobs after school hours. Moreover, many primary school teachers had not completed upper-secondary education (grade 12) and lacked adequate pedagogic training and very few had obtained bachelor's degrees.⁴
- 5. Since 2012, the Government of Cambodia has invested significantly in improving teacher pay and has adopted a number of policies, plans, and frameworks to improve the quality of teachers. Public school teacher pay rose considerably over the past decade, and the starting salaries of primary teachers even quadrupled from 2013 to 2020, from KHR 310,800 (US\$78) to KHR 1,272,500 (US\$318). Moreover, the MoEYS adopted a *Teacher Policy* in 2013 and a *Teacher Policy Action Plan* (TPAP) in 2015, which aim to (a) attract competent persons to the teaching profession and motivate them, (b) ensure quality of pre-service teacher training, (c) ensure regular professional development and in-service training for teachers, and (d) ensure the conditions necessary for teachers to fulfil their professional activity effectively and efficiently.⁵ However, it is unclear how much the remuneration and teacher policy reforms have succeeded in improving teaching quality to strengthen student learning outcomes.
- **6.** The main aim of this study is to explore the effectiveness of remuneration and teacher policy reforms in improving teaching quality. This includes an assessment of the attractiveness of the teaching profession, a review of teacher qualifications, and the investments in teacher capacity building as mandated by the TPAP, as well as an assessment of teacher performance in terms of effort, competencies, and classroom practices. This study aims to identify the progress made, in light of the teacher reforms of the past decade, and what additional reforms could be implemented

In 2015, 37 percent of primary school civil servant teachers had not obtained a grade 12 certificate, and only 5 percent had obtained a post-secondary degree (typically a bachelor's degree), according to data retrieved from the MoEYS Human Resources Management Information System (HRMIS).

Teacher Policy Action Plan (2015): Review and Analysis, MoEYS (2019), page 11.

to improve teaching quality to strengthen student learning outcomes.⁶ 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.⁷

- 7. This report includes 11 sections: Section 2 presents and analyzes key statistics on the public primary school teacher workforce including contract modalities, gender, age, and attrition (turnover). Section 3 discusses teacher remuneration reforms including pay rates, pay delivery, and pay compression. Thereafter, Section 4 assesses proxy indicators and survey data on the attractiveness of the teaching profession, whereas Section 5 presents an analysis of survey data on the prevalence of teacher secondary jobs. Section 6 presents and analyzes teacher qualification data from the MoEYS and the 2024 survey. Section 7 discusses the continuous professional development (CPD) policy framework and then presents survey data on in-service teacher training activities, on-site teacher training and mentoring, and teacher self-directed learning. Sections 8 and 9 present the results of the teacher math tests and classroom observations conducted as part of the 2024 survey and compare these to the 2012 results. Section 10 discusses teaching practices including the use of information and communication (ICT) technology in teaching, inclusive education, and teacher standards. Finally, Section 11 presents recommendations for teacher policy reform interventions to improve teaching quality and strengthen student learning.
- 8. This study on teaching quality in Cambodia's primary education was conducted in parallel with a study on teaching quantity 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: Instruction Time and Student Learning Can Cambodia improve Learning Outcomes by Introducing Full-day Lesson Schedules in Primary Schools? (2025), for a more detailed discussion on teaching quantity, including the relation between instruction time and student learning, instruction time in primary schools, and Cambodia's policy options to increase instruction time.

Methodology

9. The analyses and findings presented in this report are based on 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).8 Both surveys included structured interviews with teachers, school principals, and school community representatives, although the structure and topics discussed varied between the surveys. Both surveys included classroom teacher and student attendance checks, classroom

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).

⁷ Pentagonal Strategy - Phase 1 (2023). Royal Government of Cambodia, p. 41.

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 12.2.

observation exercises, and testing of teachers on their math and pedagogic competencies; see Appendix 12.2 for a more detailed description of the study's overall methodology and the specific methodology of the surveys.

- 10. An extensive range of education practitioners and sector experts were interviewed for this study on various 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, and exam affairs 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 (DPs) 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 data on the final grade 12 national examinees from the exam affairs department. Moreover, international databases were consulted, and case studies on countries increasing instruction time were reviewed. Finally, this study reviewed policies, regulations, guideline, and instructions for the MoEYS and Royal Government of Cambodia. For a more detailed description of the primary and secondary research for this study, please consult Appendix 12.2.

Demarcation and Definitions

- 12. First, this study focuses on the quality and quantity of 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; they are mentioned only to provide context for the analyses.
- **13. Second, 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*.

- 14. Third, 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 a 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 12.3 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.
- **15.** Fourth, the years for which education datasets could be retrieved are not fully aligned to the years when the teacher and school surveys were conducted. The World Bank Teacher and School Surveys were conducted in 2012 and 2024, whereas most MoEYS datasets that could be retrieved ranged from 2013 to 2023 (or shorter ranges). Years in the analyses presented in this report do not always fully align, especially when an analysis combines survey data and existing secondary data, which can be confusing for the reader.
- 16. Finally, all Cambodian riel (KHR) amounts are converted in the text to US dollar amounts using a fixed conversion rate (US\$1 = KHR 4,000). These conversions are added for ease of reading and do not accurately reflect average annualized conversion rates.

2 Teacher Workforce Composition

- 17. This section describes and analyzes multiyear datasets on teachers, including the composition of Cambodia's public primary school teacher workforce (numbers, contract modalities, gender, age, and work experience). It thereafter analyzes the available data on teacher attrition and describes survey data on teacher redeployment. Cambodia's general education is subdivided into four programmatic levels: preschool, primary, lower-secondary, and upper-secondary education; see Box 1. Education datasets based on implementation-level self-reported data, such as the EMIS and reports using its data (such as the Education Congress Report), are disaggregated based on these four programmatic levels.
- 18. However, the four programmatic education levels are *not* reflected in the MoEYS financial and administrative structure. Education budgets, expenditures, and HR management systems are not structured along these four programs. Instead, the program budget structure consolidates all *salaries and wages* expenditures (including preschool, primary, secondary, and youth and sport staff) into a single MoEYS program. The MoEYS' HRMIS categorizes teachers by their qualification rather than by their position/appointment in the general education program. This significantly impedes data analyses and education policy research (including for this study). Indicators such as 'per student spending in primary education' can be estimated but cannot be accurately quantified, as education spending is not classified as such. Similarly, there is no accurate, centralized, and up-to-date registry of all teachers and staff employed by the MoEYS at public primary schools, preventing (for example) the accurate determination of the number of primary school teachers, as MoEYS staff and positions are not classified as such.

Box 1: Cambodia's General Education Programs

Cambodia's general education is subdivided into four programmatic levels: preschool, primary, lower-secondary, and upper-secondary education. All programs fall within the mandate of the MoEYS (which also includes non-formal education and higher education). Primary education, the focus of this study, covers grades 1 to 6 (students typically ages 6 to 12). Subjects taught in primary school include Khmer, math, science, social studies (including art), physical and health education, and local life skills. Primary school students represent 68 percent of total enrollment in general education (grades 1 to 12) and primary school teacher positions represent around 60 percent of total general education teaching positions; see the table below. Preschool and primary education teachers require a grade 12 certificate and a 2-year pedagogic degree, commonly referred to as '12+2'. Lower- and upper-secondary teachers have higher qualification requirements.

	Preschool	Primary	Lower Secondary	Upper Secondary
Grades	Age 3 to 5	1 to 6	7 to 9	10 to 12
Number of enrolled students	257,724 ª	2,265,783 ª	662,283 b	395,829 b
Net enrollment rate b	n.a.	91.6	48.0	35.5
Gross enrollment rate b	n.a.	104.1	61.0	42.9
Number of classes ^b	8,824	64,289	15,335	8,507
Number of classrooms ^b	7,536	47,766	13,559	8,003

Average class size ^b	29	35	43	47
Number of civil servant teachers ^a	5,426	44,905	28,829	16,078
Contract teachers	No	Yes	No	No
Overtime modality	No	Double shift	Overtime - Yes	Overtime - No
Number of temporary teachers	_	21,680	_	_
Teacher minimum qualification	12+2	12+2	12+2	12+4+1
Teacher subject specialization	None	None	Yes	Yes
Teacher per class	0.6	0.7	1.9	1.9
In-class teaching hours per teacher	18	25	18	16
Lessons per week c	n.a.	27–30	32–35	32
Subjects ^c		Khmer, math, social studies (including art), science, physical and health education, and local life skills	Khmer, math, social studies, sciences, foreign languages, physical and health education and sport, and local life skills	Khmer, math, foreign language, physical and health education and sports, physics, chemistry, biology, earth science, history, geography, moral and civic, economics, ICT,

Source: a. MoEYS' Congress Report 2024; b. EMIS 2023-2024; c. Curriculum Framework 2005-2009.

2.1 Teachers, Full-Time Equivalent Positions, and School-Level Staff

19. According to the Education Congress Report (2023), there were 66,585 filled teacher full-time equivalent (FTE) positions across the 7,338 public primary schools in Cambodia in the 2022–2023 school year. These are (a) 44,905 'regular' civil servant teacher positions, or 67 percent of total teacher FTEs; (b) 12,425 contract teacher positions, or 19 percent of total teacher FTEs; and (c) 9,255 double-shift positions (that is, one individual civil servant working an additional shift on top of her/his regular teaching or non-teaching position), or 14 percent of total teacher FTEs; see Figure 2.9 Although, according the HRMIS data, the bulk of these double-shift positions is filled by civil servant teachers (contract teachers are not allowed to fill double-shift positions), a significant share is also filled by school management and support staff (principals, their deputies, librarians, and so on). There were 57,330 individual teachers working in primary schools, but the combined teacher FTE positions total 66,585.

⁹ A similar composition was found in the teacher and school survey (2024).

66,585 57,330 44,905 12,425 9,540 9,255 3,163 Civil Servant Contract **Total Teachers** Double Shift **Total Teachers** School School Teachers Teachers (People) **Positions** Positions (FTEs) Management Support Staff Staff

Figure 2: Teaching and non-teaching positions at public primary schools (2022–2023)

Teaching Positions

Source: Teaching positions and total non-teaching positions based on Education Congress Report data (April 2023). Distribution of non-teaching positions (management and support) based on HRMIS 2023 data.

Non-Teaching Positions

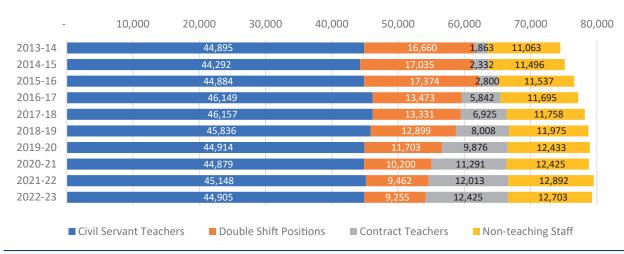
20. Besides the teaching positions, there were an additional 12,703 non-teaching FTE positions across the 7,338 public primary schools, according to the Education Congress Report (2023). Three-quarters (75 percent) of these (9,540) are managerial positions, including school principals and deputy principals, whereas the remaining one-quarter consists primarily of librarians and other support staff. Combined, there were 79,288 FTE positions (both teaching and non-teaching positions) at public primary schools in Cambodia in 2022–2023. This includes all positions at public primary schools but excludes all staff (managerial, administrative, support) working at district and provincial education offices (DEOs and PEOs) and the central MoEYS in Phnom Penh.

Evolution (2014–2023)

- 21. Over the past decade (2014–2023), the number of regular civil servant teacher positions at public primary schools has remained stable, but total teacher FTEs have increased, due to an increase in non-civil servant teaching positions. Civil servant teacher positions at public primary schools totaled 44,895 in 2013–2014, only marginally less than the 44,905 positions in 2022–2023; see Figure 3. A minor increase in the civil servant workforce can be observed between 2016 and 2018, but thereafter the number again decreases. However, the number of double-shift positions declined significantly in the same period, from 16,660 to 9,255 (or a 44 percent decline), and the number of contract positions rose from 1,863 to 12,425 (a 567 percent increase). Overall teacher FTEs rose from 63,418 to 66,585 (a 5 percent increase).
- 22. Moreover, the number of non-teaching staff rose by 15 percent from 11,063 in 2013–2014 to 12,703 in 2022–2023, and thus the total school FTEs (teaching and non-teaching) in 2022–2023 rose by 6.5 percent compared to 2013–2014. The number of enrolled primary school students declined marginally (by 1 percent), from 2.07 million in 2013–2014 to 2.06 million in 2022–2023.

¹⁰ The MoEYS HRMIS database includes missing data which had to be excluded from this analysis.

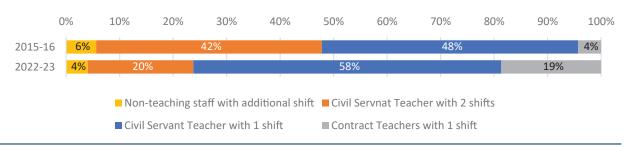
Figure 3: Evolution of teaching and non-teaching positions at public primary schools (2013–2014 to 2022–2023)



Source: Multiple Education Congress Reports (2013 to 2023).

23. Due to the decline in double-shift teaching positions, the teacher workforce composition has changed significantly in the past decade, and classes taught by teachers working two shifts have halved since 2015. In 2015–2016, 69 percent of classes were taught by civil servant teachers, 27 percent by double-shift teachers, and only 4 percent by contract teachers. Importantly, the bulk of double-shift teaching positions (79 percent) were filled by civil servant teachers, and thus almost half of all classes (48 percent) were taught by teachers (or non-teaching staff) working two shifts.11 In 2022–2023, this changed to 67 percent civil servant positions, 14 percent double-shift positions, and 19 contract teacher positions. As a result, almost one-quarter of classes (24 percent) were taught by a teacher working two shifts and almost one in five (19 percent) were taught by contract teachers; see Figure 4.

Figure 4: Primary school classes taught by a person working two shifts or only one shift (2015–2016 and 2022–2023)



Source: World Bank staff calculations on the distribution of double shifts based on MoEYS' HRMIS data and multiple Education Congress Reports (2013 to 2023).

2.2 Gender, Age, and Experience

24. The percentage of classes taught by female teachers has risen significantly over the past decade, from 46 percent in 2014 to 60 percent in 2023. According to the Education Congress Report (2023), 59 percent of *civil servant* teachers were female, 48 percent of *double-shift positions* were filled by a female civil servant, and 69 percent of *contract teachers* were female; see Figure 5. Nearly 61 percent of *individual teachers* (persons) at public primary schools were

Not all double-shift positions are filled by civil servant teachers. School management and support staff also work extra teaching shifts. Based on the Education Congress Report data from 2023 and the distribution across these categories in the HRMIS database, 21 percent (out of 27 percent) double shifts were worked by teachers (creating 42 percent classes taught by teachers working two shifts), and another 6 percent (out of 27 percent) were taught by a non-teaching school-level staff.

female teachers (GPI 1.59) in the school year 2022–2023, and 60 percent of classes (that is, total teacher FTE positions) were taught by female teachers. The percentage of female teacher FTEs rose significantly over the past decade. In 2013–2014, only 46 percent of classes were taught by female teachers. Since then, female representation has increased across all teacher modalities, especially for contract teachers (69 percent of contract teachers in 2022–2023 were female).

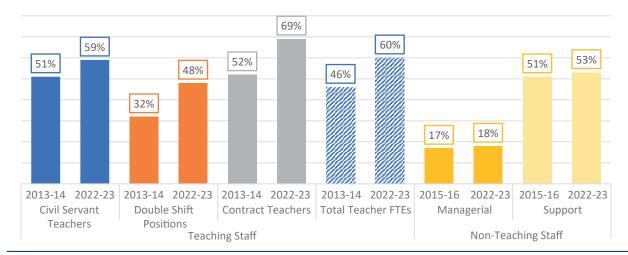


Figure 5: Percentage of female teaching and non-teaching staff (2013-2014 and 2022-2023)

Source: Teaching staff data from multiple Education Congress Reports (2013 to 2023); non-teaching data from MoEYS' HRMIS.

- 25. However, according to HRMIS data, only 18 percent of school principals and deputy principals were female in 2023, and gender parity in school managerial positions has barely improved since 2015. Although the number of managerial positions at the school level expanded from 8,366 in 2015 to 9,540 in 2023 (a 14 percent increase), the percentage of female principals (and deputies) barely improved. In 2023, less than one in five (18 percent) managerial positions were filled by women. However, survey data collected from a random sample of primary schools in 2012 suggest a significant increase since 2012, when only 10 percent of principals interviewed were female.¹³
- **26.** There are more female teachers working in urban schools compared to disadvantaged schools. The 2024 survey found that 70 percent of teachers (that is, civil servant and contract teachers but excluding double shifts) in urban schools were female, whereas only 57 percent of teachers in disadvantaged schools were female.

Age and Experience

27. The average age of public primary school teachers (all contract modalities combined) was 38 years, according to the 2024 survey data; see Figure 6. The average rose by 2 years compared to 2012 when the average age was 36 years. Age strongly correlates with work experience where teachers typically start their careers around age 21. Contract teachers are significantly younger (average age 27 years) compared to single-shift (40 years) and double-shift (37 years) teachers. Furthermore, male teachers are on average older (41 years old) than female teachers (36 years old). There is also significant difference in the average age of urban primary school teachers (43 years), rural teachers (38 years), and teachers in disadvantaged schools (34 years).

¹² Classes taught by female teachers is based on the weighted average across different teacher modalities.

The 2024 Teacher and School Survey found a similar trend where 28 out of the 150 interviewed school principals (18.7 percent) were female. However, in the 2012 Teacher and School Survey, 15 out 149 principals (10 percent) interviewed were female; the difference (*<0.05) suggests that the percentage of female principals rose more significantly between 2012 and 2015–2016.

43 40 38 38 37 36 34 27 22 19 19 16 17 16 15 13 5 Single Shift **Double Shift** Urban Disadv. Female Male Contract Rural Teacher Total Gender **Contract Modality** Location

Average years of experience

Figure 6: Median age and average years of work experience by gender, contract modality, and location (2024)

Source: 2024 World Bank Teacher and School Survey.

28. According to HRMIS data, the age distribution of the teacher workforce has evolved significantly since 2015. In 2023, there were more older teachers (ages 48 and older) and fewer younger teachers (ages 22 or younger); see Figure 7. In 2015, only 11 percent of the civil servant teacher workforce were ages 40 or older, but in 2023 this age cohort had risen to 26 percent. The age distribution in 2023 showed a considerable peak between ages 48 to 56, likely reflecting a rapid post-conflict expansion of the teacher workforce in the late 1980s and early 1990s. Conversely, the percentage of teachers ages 22 or younger declined from 11 percent in 2015 to only 3 percent in 2023. The decline is likely caused by a combination of the teacher training and recruitment freeze in 2020 (resulting in fewer young teacher graduates in 2022), an increase rate in upper-secondary completion (resulting in more teachers starting their careers after completing the full 12+2 years of education), and the recent introduction of a 4-year pedagogic degree for primary school teachers.



Figure 7: Percentage of primary education school staff by age (2014-2015 and 2022-2023)

■ Average Age

Source: MoEYS' HRMIS data on primary education school staff (2015 and 2023).

2.3 Teacher Attrition and Redeployment

29. MoEYS data on teacher attrition lacks detail and appears to be incomplete, limiting value of the data for policy analysis and development. Attrition data is particularly useful for forecasting future teacher needs (and corresponding pre-service training capacity) and the effectiveness of

retention measures, but they are also critical to forecast the costs and time required to implement reforms (that is, selectively applied to newly recruited teachers, such as adjusting working hours or pay scales). The MoEYS' Personnel Department maintains a database on staff attrition. However, this data does not disaggregate staff by education level (preschool, primary, lower-secondary, and upper-secondary) nor by teaching and non-teaching staff.

- **30.** The Personnel Department's attrition database suggests that the MoEYS' staff attrition was on average 1.7 percent between 2013 and 2023—two-thirds due to retirement. From 2013 to 2017 the attrition rate fluctuated from 1.9 to 3.0 percent, whereas in the years thereafter (2018 to 2023) it fluctuated from 0.8 to 1.6 percent. Two-thirds (67 percent) of attrition is attributed to 'Retirement', 27 percent is attributed to 'Termination' (which includes 14 percent 'Deceased', 8 percent 'Voluntary Termination', and 5 percent 'Termination + Request for Severance Pay'), and 6 percent is attributed to 'Transfer outside of the Ministry'. The database also tracks intra-ministerial transfers: on average 0.4 percent of MoEYS staff between 2013 and 2023. The average attrition rate (1.7 percent) and intra-ministerial transfers (0.4 percent) seem to be undercounting actual turnover in the teacher workforce.
- 31. However, an analysis of pre-service teacher training enrollment data suggests an average replacement rate of 4 percent among primary school teachers between 2013 and 2019. Between 2013 and 2019, 13,247 students were enrolled in 2-year pedagogic degree programs for primary school teachers across 18 teacher training institutes. Of those enrolled students, 12,983 were recruited to fill existing positions, on average 1,855 per year or 4 percent of the total primary school teacher workforce.¹⁴
- 32. Similarly, an analysis of HRMIS data suggests there is significant non-retirement attrition in the primary school teacher workforce (around 2.5 percent year-on-year). In 2015, the civil servant primary teacher cohort ages 30 to 49 totaled 28,638, whereas 8 years later the cohort ages 38 to 57 totaled 23,437 (an 18 percent decline or a 2.5 percent average year-on-year). This non-retirement attrition includes voluntary and involuntary termination, death, and intra-ministerial transfers (in the case of primary teachers, this might include upgrading to lower- and upper-secondary teachers or switching to administrative positions within MoEYS). Both teacher training enrollment and HRMIS data suggest attrition rates are higher that indicated in the attrition database. Moreover, a relative overrepresentation of older teachers ages 49 to 55 (in 2023) (see Figure 7) suggests that between 2028 and 2032, turnover rates among public primary school teachers might be as high as 5–6 percent.
- 33. By 2033, the MoEYS is 'committed' to only 45 percent of the current teacher workforce (that is, has a semi-permanent civil servant appointment), with significant implications for teacher training and teacher HR regulation reforms. With 21,680 positions (33 percent of total teacher FTEs) filled by temporary contracts (contract and double-shift positions), 12,099 civil servants (27 percent of civil servant teachers) expected to retire, and another 2,636 civil servants (6.9 percent of civil servant teachers) expected to leave due to non-retirement attrition, only 30,170 of the current civil servants are expected to be part of the 2033 workforce. Assuming the workforce remains equal in size (66,585 FTEs), this equals 45 percent of the current teacher workforce. Conversely, 55 percent of the 2033 workforce, or 36,415 teacher positions, have not yet received pre-service training (as of 2023) and have not yet been appointed (either temporarily or semipermanent).

This analysis focuses on the 2013–2019 period, as the years thereafter become irregular due to teacher training enrollment and recruitment freezes seemingly resulting from fiscal constraints and the COVID-19 pandemic. During 2015–2021 (when these enrolled students graduated), 264 civil servant teacher positions were added—and thus existing vacant positions were not filled. Those enrolled in the 12+4 pedagogic degree programs offered at the Phnom Penh and Battambang Teacher Education Colleges have been excluded as these graduates joined the workforce in 2022.

Teacher Relocation and Mobility

34. In terms of relocation, there are significant differences between teachers in urban, rural, and disadvantaged areas. The rate of relocation and the number of schools a teacher has worked are higher for urban teachers. Overall, more than half (54 percent) of all teachers in the 2024 survey reported not being born in the same commune where they teach; around one-third (32 percent) came from different districts and one-quarter (24 percent) came from outside the province. However, only 11 percent of rural teachers were not born in the province where her/his school is located; for teachers in urban and disadvantaged areas, this is 42 percent and 25 percent, respectively; see Figure 8.

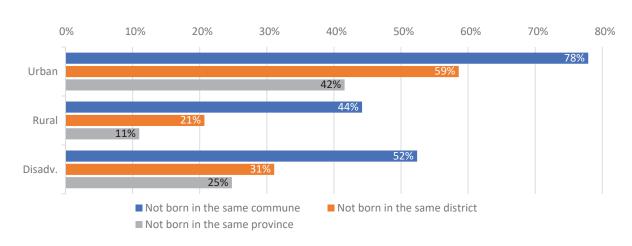


Figure 8: Percentage of teachers not born in the same commune, district, or province as the school (by location)

Source: 2024 World Bank Teacher and School Survey.

35. Teachers in 2024 have on average worked at 1.7 schools (similar to 2012), but this average is significantly higher for urban teachers (2.1) than their rural and disadvantaged colleagues (1.6). For 29 percent of teachers in urban areas, it is the first school they worked at, whereas this is 52 percent and 55 percent in rural and disadvantaged areas, respectively. In urban schools, 29 percent of teachers have already worked at three or more schools, compared to only 10 to 11 percent in rural and disadvantaged areas; see Figure 9. Combined with the data on age and work experience discussed earlier, this suggests that part of the primary school teacher workforce relocates to schools in disadvantaged areas to start their careers, but (thereafter) there is a strong overall tendency for teachers to relocate to urban schools.

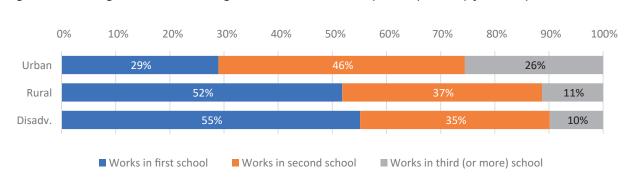


Figure 9: Percentage of teachers working in first, second, and third (or more) school (by location)

Source: 2024 World Bank Teacher and School Survey.

36. Most teachers in the 2024 survey report living within a 5-kilometer radius of the school and requiring less than 15 minutes to commute to school, typically traveling by motorbike. In 2024, 87 percent of teachers reported using a motorbike to commute to work (2.5 percent reported using a car), compared to 67 percent in 2012 (and 0.3 percent by car). Conversely, only 10 percent of the teachers reported walking or cycling to work, whereas in 2012 that was still 32 percent. Teachers in the 2024 survey reported living slightly further away from their schools than in 2012 while requiring slightly less time for their commute to work (likely reflecting increasing rates of motorbike use to commute to work 2024). Urban teachers commute slightly further and longer to work than rural teachers, but overall, distance, duration, and mode of travel do not vary considerably between teachers in urban, rural and disadvantaged areas.

Teacher Remuneration 3

37. This section discusses teacher remuneration reforms that have been implemented since 2012 and the impact of these reforms on teacher salaries, as well as pay delivery and compliance and the relative compression of the teacher salary scale and teacher incentives.

3.1 From Wage Penalty to Wage Premium

- 38. In 2012, public primary school teachers earned less than their private sector peers, teachers were typically working second jobs to substitute their incomes, and low teacher pay was considered a key impediment to attracting high-caliber graduates to the teaching profession. In a World Bank study on public school teachers in Cambodia, reviewing 2007–2012 teacher pay data, teacher remuneration was singled out as one of the priority areas for reform to improve the quality of teaching in Cambodia's public schools. According to the study, teacher pay was too low and compressed, married teachers with two children lived below the poverty line, and teachers earned less than other Cambodian professionals, even when correcting for human capital endowments. As a result, the MoEYS struggled to attract high-caliber candidates to the teaching profession, and teachers lacked the motivation to aspire to higher levels within the profession. The study recommended urgent reform of (a) starting teacher pay, (b) pay changes over a teacher's career, (c) performance-oriented pay, and (d) pay delivery. 15
- 39. From 2013 to 2019, the salaries of public school teachers rose significantly, turning a public school teacher wage penalty in 2012 into a wage premium in 2019. The considerable increase in salaries of public school teachers (as part of broader civil service compensation reforms), as well as improved pay delivery, are perhaps (one of) the most significant teacher reform interventions in the past decade. ¹⁶ Between 2003 and 2012, Cambodian public sector wages were considerably lower than private sector wages. This public sector wage penalty ranged from 38 percent in 2003 to 25 percent in 2012; see Figure 10. However, as a result of pay reforms and a significant increase in pay rates, the Cambodian public sector received a wage premium in 2019, when public sector workers received 19 percent more than their private sector peers (controlling for human capital endowments).
- 40. In 2019, Cambodian public school teachers earned 27 percent more than their peers in the private sector, according to Cambodia's Socio-Economic Survey. The public sector education wage premium relative to the private sector (even after accounting for characteristics such as experience, educational qualification, gender, and location) was 18 percent in 2019.¹⁷ This positive wage premium is higher than the East Asia and Pacific regional average of 11 percent in the education sector. Notably, the wage premium amplifies when focusing on teachers alone, who experience a premium of 27 percent. However, a wage premium for public school teachers is not uncommon in the East Asia and Pacific region, where the average is estimated at 21 percent.¹⁸

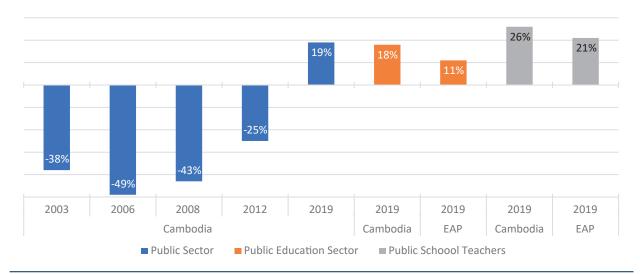
¹⁵ Tandon and Fukao 2015, 4.

¹⁶ World Bank 2024, 2.

These wage differentials do not consider additional sources of compensation like allowances and in-kind transfers, which are likely higher in the public sector. Therefore, if anything, these estimates may be underreporting the wage premia. However, the lack of such information on the household surveys affects the ability to perform this additional analysis.

¹⁸ Based on the World Bank's Worldwide Bureaucracy Indicators using Cambodia's Socio-Economic Survey data (2019). This premium for teachers underscores a significant advantage in earnings for educators in the public domain. The government should balance the high wage premia in the education industry with efforts to enhance public sector efficiency to ensure that increased wages translate into improved services and benefits for the public. Since these jobs pay significantly higher wages and provide more stable working conditions with better benefits, it could add distortions to the labor market by raising the reservation wages, which could result in queuing and crowding-out effects in the private sector.

Figure 10: Evolution of wage penalties and premiums for Cambodia's public sector (2003–2019) and Cambodian and regional education sector and public school teachers' wage premium comparison (2019)



Source: Cambodia Public Finance Review (World Bank 2024); the World Bank Bureaucracy Indicators, based on Cambodia's Socio-Economic Survey (2019).

- 41. In 2019, the median salary of a primary school teacher (KHR 1,381,350 [US\$345]) significantly exceeded the median wage of other 'professionals' (KHR 1,290,000 [US\$323]) and the median wages in all other occupational categories in Cambodia, ranging from KHR 606,667 (US\$152 [for skilled agricultural workers]) to KHR 1,300,000 (US\$325 [for the armed forces]). Importantly, the compensation reforms resulted in considerably higher MoEYS spending on salaries.
- **42. Total MoEYS** spending rose from **1.8** percent of gross domestic product (GDP) in **2013** to **3.3** percent in **2019**, primarily driven by higher spending on salaries (a significant increase, though still low compared to most of its peers in Southeast Asia).²⁰ Increased education spending, specifically teacher salary spending, has raised concerns regarding spending efficiency—and more broadly the impact of teacher remuneration reforms. It raises the following questions: Now that public school teachers are paid a fair wage, is the profession also attracting higher-caliber graduates? And are public school teachers in 2024 working less on the side (moonlighting) compared to before the remuneration reforms, so that they can focus more on their primary tasks? These two questions will be addressed in sections 4 (Attractiveness of the Teaching Profession) and 5 (Teacher Secondary *Jobs*). The remainder of this section describes the changes in the remuneration scale and payment process.
- 43. According to MoEYS teacher pay regulations, a starting primary school teacher's salary rose from KHR 310,800 (US\$78) in 2013 to KHR 1,400,000 (US\$350) in 2023, a 350 percent increase over 10 years (or four and a half times the amount a decade earlier); see Box 2 for a brief description of the teacher pay structure. Public school teacher salaries rose across all levels of general education, (starting lower-secondary teacher salaries [civil service grade B.3.4] rose by 142 percent and starting upper-secondary teacher salaries [A.2.4] by 157 percent) but none as fast as the base salary for starting primary and preschool teachers (C.10). The year-on-year increases were especially significant from 2013 to 2014, when a starting primary school teacher's salary rose by 77 percent. From 2014 to 2019, the starting primary school teacher's salary continued to rise by double digits (between 14 and 23 percent) but thereafter froze (due to the fiscal restrictions introduced with the COVID pandemic) and rose again in 2023 by 10 percent; see Figure 11.

¹⁹ Report on the Cambodia Labor Force Survey 2019, National Institute of Statistics Ministry of Planning (2019), page 41. Occupational categories as defined by the International Labour Organization (ILO) International Standard Classification of Occupations 2008.

²⁰ World Bank 2024, 35.

Box 2: Teacher pay structure and regulations

Public school teacher pay consists of two main components (the base-salary and 'position pay', also known as functional allowance) as well as several allowances. These salaries and allowances fall under the regulatory authority of the MCS, which (in a joint effort with the Ministry of Economy and Finance [MEF] and applicable ministries) adjusts pay rates annually for the civil service as a whole, as well as for specific positions within ministries.

The first component of a teacher's salary is referred to as the 'base-salary' and is determined by a civil servant's rank (consistent across ministries). Preschool and primary school teachers are graded 'C'. Grade C includes 10 steps. Grade C step 10 (C.10) is awarded to starting primary teachers and C.1 is awarded to the most senior preschool and primary teachers. Lower-secondary and upper-secondary teachers are graded 'B' and 'A', respectively.21 The civil servant's (for example, teacher's) rank (grade and step) determines an index, which is used as a multiplier for a fixed 'unit value' (that is, the same across ranks).²² The multiplied result is the base-salary.

Thus, Teacher base-salary = index (based on grade and step rank) × fixed unit value (in riel).

The second component is referred to as 'position pay' or 'functional allowance' and is specified for different positions with the MoEYS, including for preschool and primary teachers as well as lower-secondary and upper-secondary teachers. The position pay for preschool and primary teachers was KHR 760,000 (US\$190) in 2024, only marginally lower than the position pay for lower-secondary and upper-secondary teachers (KHR 770,000 [US\$193] and KHR 780,000 [US\$195], respectively).²³

In addition to these main components, a teacher might receive several allowances, including allowances for (a) working in remote areas (a provincial classification with a KHR 100,000–120,000 (US\$25-30) allowance), (b) working in disadvantaged schools (a classification determined by the MoEYS), (c) having a spouse and children, (d) teaching multi-grade classes, (e) teaching a double shift (only allowed for primary teachers), and (f) working overtime (only available for lower-secondary teachers).

There is no pension contribution deducted from the gross total amount, but a tax deduction is applied. Pension contributions are made separately; teacher pensions are paid out of a pension fund without the involvement of the MoEYS. Pension contributions are not considered in the teacher pay structure nor deducted from the teacher gross salary. Civil servants are supposed to pay 5 percent income tax after the first KHR 1 million (US\$250) and 10 percent after thereafter. However, teachers are eligible for tax and the effective tax rate is significantly lower.²⁴

According to the civil service law, teachers are expected to work 40 hours a week, like other civil servants. However, class/lesson hours are specified by the MoEYS regulation. Like other civil servants, teachers are entitled to 15 annual leave days in addition to 24 or 25 official holidays, and they are not allowed to earn additional income in the private sector. Teachers retire at age 60 or can opt to retire with full pension after 30 years of service.

Source: Interviews with MoEYS and MCS officials.

²¹ Grades B and A also include 'bands' numbered 1 to 3. Each band has four to six steps and combined there are 14 different ranks within grade B and within grade A.

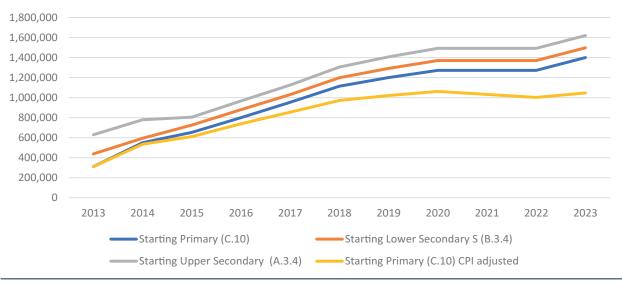
²² The fixed unit value is revised each year (considering fiscal restrictions and inflation) by the MCS and MEF in consultation with the applicable ministries, usually in December, and thereafter approved by Cabinet.

²³ This position pay is also reviewed annually by the MCS and MEF in consultation with the applicable ministries, usually in March, and thereafter approved by Cabinet.

²⁴ A 2022 pay slip sample reviewed for this study suggests that there are considerable tax deductions applied based, among others, on the teacher's marital status and number of children.

44. Even when correcting for inflation, consumer prices rose **34** percent from **2013** to **2023**, the starting primary school salary still gained **237** percent, and thus Consumer Price Index (CPI)-adjusted purchasing power more than tripled for starting primary school teachers; see Figure 11. CPI-adjusted purchasing power rose significantly during 2013–2019 but thereafter declined slightly (due to limited wage increases and continued inflation).

Figure 11: Evolution of starting teacher salaries - primary, lower-secondary, upper-secondary, and primary CPI adjusted (2013–2023)



Source: World Bank staff calculations based on MoEYS Personnel Department salary scale data.

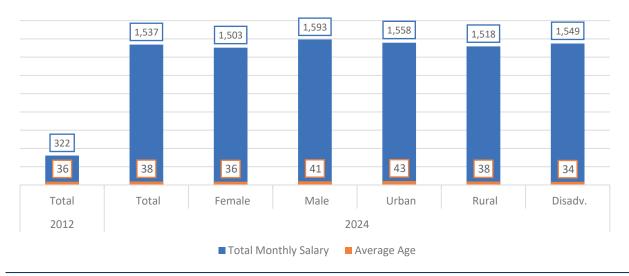
3.2 Pay Delivery and Compliance

- **45.** Since 2012, the MoEYS has also made considerable improvements in salary payment processes and in 2024 all teachers reported receiving their salaries through bank transfers, reducing delays and leakage. Underpayment, facilitation fees, and salary payment delays were common in 2012 (only 37 percent of teachers reported that they always received their full salary amount in 2012) and a major reason for discontent among teachers. Since 2012, when all teachers' salaries were paid in cash, payment reforms mandated establishing bank accounts for all teachers, and in 2024 all teachers reportedly received their salaries through bank transfers. In 2012, 73 percent of the teachers reported delays in salary payment, whereas only 14 percent reported delays in 2024. Facilitation fees, especially common with cash payments, have also declined from 54 percent of the teachers who responded in the 2012 survey to only 3 percent in the 2024 survey.
- **46.** Furthermore, the **2024** survey data suggests that compliance with salary regulations is strong (that is, teachers are reporting the pay rates expected based on policy). First, there is no statistically significant difference between self-reported total monthly salaries of teachers in urban, rural, and disadvantaged areas. Urban and disadvantaged area teachers report slightly higher salaries (see Figure 12), but this is to be expected, as urban teachers are older (and thus likely awarded a higher *step* on the primary teacher pay scale), and teachers typically receive an allowance for working in disadvantaged areas. Similarly, male teachers report slightly (6 percent) higher salaries than female teachers (and this difference is statistically significant), but this is to be expected as male teachers are on average 5 years older than female teachers and thus likely awarded a higher step on the primary teacher pay scale.

²⁵ Tandon and Fukao 2015, 32.

The median facilitation fee reported by teachers rose from KHR 2,000 (US\$0.5) in 2012 to KHR 6,000 (US\$1.5) in 2024. However, the sample size for 2024 is too small—only 7 percent of (n = 134) double-shift teachers reported paying a facilitation fee.

Figure 12: Average teacher self-reported monthly salary (including allowances) and age, by year (2012 and 2024), gender, and location

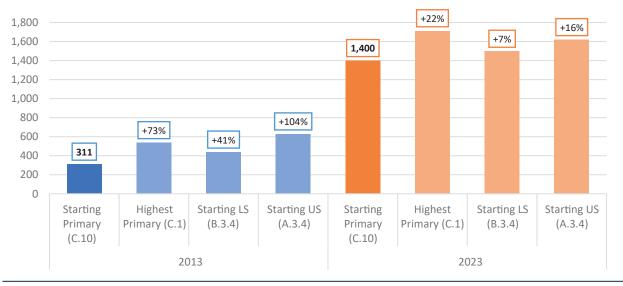


Source: 2012 and 2024 World Bank Teacher and School Surveys.

3.3 Wage Compression and Incentives

47. The compensation reforms also resulted in considerable wage compression, reducing the differences between primary, lower-secondary, and upper-secondary teachers. In 2013–2023, salaries of primary school teachers rose considerably more than salaries for lower-secondary and upper-secondary teachers, resulting in significant between grade compression. In 2013, the starting salary for an upper-secondary teacher (A.3.4) was double (+104 percent) the salary of a starting primary school teacher (C.10), whereas starting lower-secondary teachers earned 41 percent more than their primary school colleagues in 2013; see Figure 13. In 2023, these differences had declined to only 16 percent and 7 percent, respectively; that is, a primary school teacher considering upgrading her/his qualification to lower secondary could expect a 41 percent raise in 2013 and only a 7 percent pay raise in 2023.

Figure 13: Relative increase compared to starting salary of a primary school teacher (2013 and 2023)



Source: World Bank staff calculations based on MoEYS Personnel Department salary scale data.

- 48. Similarly, compensation reforms resulted in smaller within-grade differences (incremental teacher pay raises, once every two years, based on annual performance reviews and typically reflecting experience or seniority). Positive performance evaluations result in step promotions from C.10 (the lowest step assigned to starting primary school teachers) to C.1 (the highest step assigned to the most senior primary school teachers). Performance evaluations are typically completed every year, step promotions are awarded every two years, and almost all teachers are awarded step promotions. Teacher salaries typically increase, based on step promotion, every 2 years over a period of 18 to 20 years. In 2013, the highest salaries for primary, lower-secondary, and upper-secondary teachers (C.1, B.1.1, and A.1.1) were 73 percent higher than the lowest salaries for these teachers (C.10, B.3.4, and A.3.4), whereas in 2023, these intra-grade differences declined to 22 percent, 28 percent, and 34 percent, respectively. Thus, in 2013, a primary school teacher salary would typically increase 2.93 percent year-on-year (almost 6 percent every two years), based on step promotion, whereas in 2023, a primary school teacher salary would typically increase 1.07 percent year-on-year (slightly more than 2 percent every two years).
- 49. Moreover, teacher incentives such as the 'disadvantaged/relocation allowance' have not been raised on par with base salaries, declining their overall share in take-home salary and reducing their strength to incentivize teacher behavior. For example, teachers assigned to schools in disadvantaged areas receive a monthly 'relocation' allowance—to incentivize qualified teachers to accept deployment in those areas. In 2024, these 'disadvantaged' school teachers typically reported receiving a KHR 80,000 (US\$20) monthly relocation allowance, double the amount typically reported by teachers in 2012. However, even though the monthly relocation allowance doubled in this period, its overall share in the take-home salary declined as 'regular' salaries rose much more. In 2013, the KHR 40,000 (US\$10) allowance constituted a 13 percent increase in take-home salary for a starting primary school teacher (C.10), whereas in 2023 this constituted only a 6 percent increase.
- 50. Similarly, other allowances have lost relevance against a significantly higher starting primary school teacher salary. Teachers receive an additional KHR 15,000 (US\$3.75) if they are married (that is, a spousal allowance), constituting a 1.1 percent increase in take-home salary, and they receive an additional KHR 10,000 (US\$2.5) per child (a 0.7 percent in take-home salary). In 2024, most teachers (92 percent) had heard of the 'Good Performing Primary Schoolteacher Award'. The teachers' median estimate of this award is KHR 120,000 (US\$30), constituting a one-time bonus of around 8.6 percent of monthly salary. The additional pay teachers receive for working three Thursdays a month is KHR 41,000 (US\$10.3), around 3 percent additional pay in 2023. The only 'allowance' that has kept pace with salary increases is the double-shift allowance (de facto an additional full salary paid for teaching an additional full shift). The double-shift allowance is tied to the starting salary of a primary school teacher (C.10) and thus rose by 350 percent, just as regular starting salaries.

4 Attractiveness of the Teaching Profession

51. This section analyzes data that could be considered proxy indicators for the attractiveness of the (primary school) teaching profession—and thus the impact of MoEYS reforms aimed at attracting high-caliber teacher trainees. This section first briefly describes trends in the number of applications to Provincial Teacher Training Centers (PTTCs) and teacher retention data. Thereafter, it analyzes data on the qualifications of teacher trainees, specifically the final upper-secondary (grade 12) national exam scores of PTTC trainees and teachers. These qualifications reflect attractiveness as the higher the final exam score, the more choice the graduate has to continue her/his post-secondary education. An increase in the grade 12 final national exam scores of PTTC trainees suggests that more graduates consider a (primary school) teacher career preferable over other (good) options, and the MoEYS teacher reforms have been successful in making the profession more attractive. To appreciate the context in which the number of applicants and the quality off PTTC trainees should be understood, Box 3 describes some of the key reforms and events affecting the teacher trainee intake and their grade 12 final exam scores. After analyzing exam scores, this section describes survey data on teacher job satisfaction and the motives for joining the workforce.

Box 3: Teacher trainees and final grade 12 national exam scores

Several teacher training and recruitment reforms, as well as broader public sector recruitment suspensions and the COVID-pandemic, have affected the teacher trainee intake and the final grade 12 national exam scores. Some of the reforms and events are briefly highlighted here, to provide context regarding the number of applicants and the quality off PTTC trainees.

2013 (and earlier): Applicants with only a lower-secondary (grade 9) degree are still accepted into pedagogic degrees; these applicants did not finish grade 12 and thus do not have a final grade 12 exam score. In some PTTCs, grade 9 graduates continued to be accepted until 2015. Moreover, cheating during the grade 12 national exam is assumed to be common and widespread, weakening trust and the validity of the exam score.

2014: Grade 12 exam national reforms introduce robust anti-cheating measures improving trust and validity but also resulting in considerably lower scores and a lower passing rate (26 percent in the first round). As an exception, a second round of final exams is organized, but even after two rounds, only 44 percent passed, compared to 84 percent to 87 percent (in the first round) in the preceding years.

2015: The MoEYS introduces 'automatic acceptance' of grade 12 graduates with final exam score A, B, or C, resulting in more 'high-scoring' graduates applying for teacher training but conversely also discouraging 'low-scoring' graduates.

2016: The 'automatic acceptance' of high-scoring graduates into teacher training is discontinued.

2019: The MoEYS introduces vacancy-specific applications. Teacher trainee applicants no longer apply to work at 'a primary school' for a specific province but instead apply for a specific vacancy within that school (with, at least in theory, the potential to reduce the average final exam scores of the accepted applicants).

2020: The grade 12 final exam is cancelled due to the COVID pandemic, and all grade 12 students are passed *without receiving an exam score*. Teacher trainees are not recruited due to a government-wide suspension of hiring new civil servants and thus also public school teachers.

2021: The national exam is delayed and takes place after the new round of teacher training recruitment. As a result, most teacher training applicants are graduates from preceding years (arguably resulting in lower-scoring applicants as high-scoring graduates would have already been accepted in other post-secondary degree programs).

2022: Another civil service recruitment suspension. No new recruitment is organized for teacher training.

2023: Recruitment of civil servants and public school teachers resumes, but responsibility for recruitment is transferred to the MCS, and the recruitment (in 2023 approved positions/vacancies) is delayed until the summer of 2024.

2024: Another civil service recruitment suspension. No additional teachers are recruited for 2024, and the recruitment is completed for 2023.

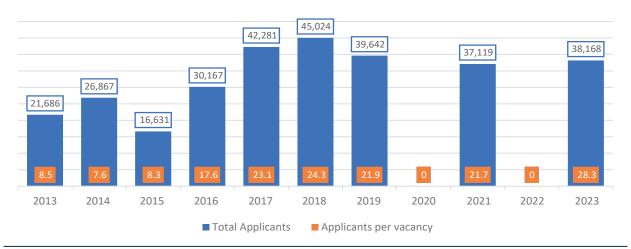
Source: Interviews with MoEYS officials and teacher training center administrators.

4.1 Teacher Training Applications

- **52.** From 2013 to 2015, the annual number of PTTC applicants averaged 21,728, whereas in the following years, 2016–2023, it averaged 38,734, a 78 percent increase.²⁷ The number of applicants was exceptionally low in 2015 (when A-, B-, and C-scoring applicants were automatically admitted—and lower-scoring candidates might have been discouraged). The number of applicants peaked in 2018 and thereafter appeared to taper off a bit; see Figure 14. While the average number of applicants rose after 2015, the average number of vacancies declined, resulting in more *applicants per vacancy*. The number of applicants per vacancy varied from 7.6 to 8.5 between 2013 to 2015 and thereafter almost tripled, to 17.6 in 2016, 24.3 in 2021, and 28.3 in 2024 (recruiting the 2023 approved batch of new teachers).
- 53. In 2024, the number of applicants per teacher vacancy was lower in remote provinces compared to the national average. In remote provinces (Koh Kong, Mondulkiri, Rattankiri, Pailin, and Odor Meanchey), the number of applicants per vacancy typically varied between 16.4 and 19.3, compared to the national average at 28.3. Preah Sihanouk, though not considered a remote province and located in the coastal area, was somewhat of an outlier with 'only' 10.1 applicants per vacancy. Conversely, the number of applicants per vacancy in Kampot, Battambang, Phnom Penh, Preah Vihear, Kep, Siem Reap, and Kandal was high, varying between 32.7 and 43.7.
- 54. However, the distribution of qualifications within each year's applicant population has varied from one year to the next, and the number of applicants does not robustly correlate with the eventual qualifications on enrolled teacher trainees. When the MoEYS introduced a policy in 2015 to automatically accept high school graduates with final exam scores (A, B, and C), this appears to have resulted in fewer overall applications but a significantly higher average final exam score of eventually enrolled teacher trainees; see Figure 17.

²⁷ This includes trainees for 4-year primary school teacher pedagogic programs provided at the Phnom Penh and Battambang Teacher Education Colleges, since 2018.

Figure 14: Total number of applicants (nation-wide) for pre-service primary teacher training (both 2- and 4-year pedagogic programs) and the average number of applicants per vacancy (2013 to 2023)



Source: MoEYS Teacher Training Department and World Bank staff calculations.

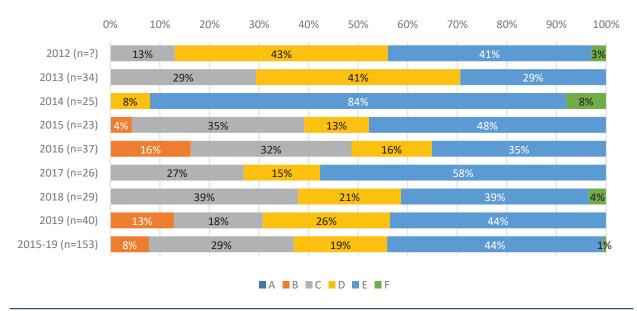
Note: No new teacher trainees were admitted to training centers in 2020 and 2022 because of a government-wide suspension of civil servant recruitment. The recruitment of the '2023 approved batch' of trainees took place in 2024.

4.2 Teacher Trainee Qualifications

- 55. One proxy indicator for the attractiveness of the primary school teaching profession is the relative quality of upper-secondary graduates enrolled in PTTCs, expressed in their final grade 12 national exam score (note that grade 12 final exams is a proxy indicator for attractiveness and not necessarily for ability or competency). However, the MoEYS does not maintain a database on PTTC trainees and their final exam scores. The analysis discussed in this section is based on self-reported data collected through surveys as well as the 'matching' of larger existing MoEYS datasets. The 2024 survey asked teachers (n = 727) to recall the year they completed their PTTC training and their grade 12 final exam score, expressed as A (being the highest) to F (being the lowest and failing the examinee). The 2012 survey asked PTTC trainees (n = 551) their final exam scores.
- **56.** In addition to teacher self-reported data, the final grade 12 national exam scores of PTTC trainees were retrieved through a *data matching* process. First, the lists (of names) of *all* PTTC trainees from 2014 to 2024 were collected (n = 14,218), and second, these teacher trainees were '*matched*' (using their names and date of birth) with the grade 12 exam database (lists of all students sitting for the final grade 12 national exam) from 2014 to 2023 (n = 1,025,786). This matching process found 11,690 PTTC trainees (82 percent of the total) in the grade 12 exam database, from which exam scores (and percentile ranks scores) were retrieved.²⁸
- 57. During 2015–2019, the average grade 12 final exam score of PTTC trainees was considerably higher than in the preceding years, according to trainee and teacher self-reported data. In the 2012 survey, only 13 percent of PTTC trainees indicated receiving a score of C on the final exam, 43 percent received a D score, and 41 percent an E score. In the 2024 survey, teachers recalled their scores and graduation year. With the exception of 2014 (when robust anti-cheating measures were introduced for the final exam and scores were much lower), since 2013, there has been an improvement in self-reported final exam scores compared to 2012; see Figure 15. The sample for individual years is too low, but across 2015 to 2019, 8 percent of teachers reported receiving a B score, 29 percent a C score, and the remaining a D score or lower.

²⁸ See Appendix 12.4 for a description of this process and the limitations of these datasets.

Figure 15: Self-reported final exam scores of PTTC trainees (2012) and primary teachers by graduation year (2013 to 2019)

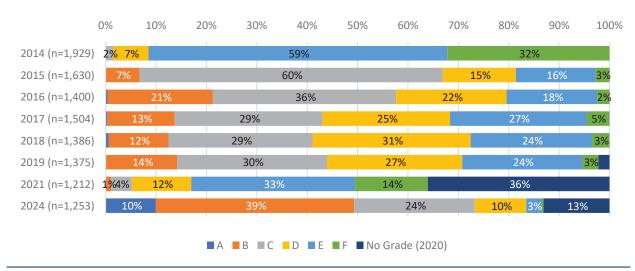


Source: 2012 PTTC trainee grades from 2012 World Bank Teacher Training Survey and 2013 to 2019 data from the 2024 World Bank Teacher and School Survey.

Note: Teachers who could not recall their score have been excluded from the sample.

58. Matched data on PTTC trainees and final grade 12 national exam scores suggests the improvements since 2015 are even more significant; on average 13 percent of trainees enrolled in PTTC programs from 2015 to 2019 received a B score on their final exam and 38 percent a C score. Scores are exceptionally high for 2015 trainees (when candidates with A, B, or C scores were automatically admitted without an entry test), more than two-thirds of PTTC trainees in 2015 had a C score or higher. Moreover, scores are again high for trainees recruited in 2024 (recruited by the MCS filling vacancies of the 2023 approved batch for recruitment), when 73 percent of trainees had a C score or higher; see Figure 16.

Figure 16: Final exam scores (A to F) of PTTC trainees based on 'matched' data (2014-2024)



Source: World Bank staff calculations based on matched data from the MoEYS database on final grade 12 national exam results and data on pre-service (primary) teacher trainees.

Note: Not all trainee names could be matched with names on the final exam registry; for a description of the methodology and limitations, see Appendix 12.4.

59. Moreover, during 2014–2024, more than half (53 percent) of the PTTC enrolled trainees were among the top 10 percent highest-scoring students sitting for the final grade 12 national exam, and 33 percent were among the top 5 percent; see Figure 17. In these years, 3–4 percent of PTTC trainees were in the top 1 percent highest-scoring students on the final grade 12 exam. PTTC trainees enrolled in 2015 (when A, B, and C scoring graduates were automatically admitted when applying for PTTCs) were of exceptionally high caliber, with 62 percent in the top 5 percentile.²⁹ However, from 2016 to 2019 (when this policy was discontinued), the percentage from the top 5 percentile rank halved to around 30 percent. Remarkably, 11 percent of the trainees admitted to primary school teacher training came from the top 1 percentile rank in 2024 and 52 percent came from the top 5 percentile rank.

0% 30% 40% 60% 70% 10% 20% 50% 80% 2014 (n=1,929) 15% 2015 (n=1,630) 17% 2016 (n=1,400) 29% 3% 2017 (n=1,504) 23% 4% 2018 (n=1,386) 23% 2019 (n=1,345) 21% 2021 (n=775) 7% 2024 (n=1,089) 21% 2014-2024 20% ■ Top 1% ■ Top 2-5% ■ Top 6-10%

Figure 17: Final exam scores (percentile rank) of PTTC trainees based on 'matched' data (2014–2024)

Source: World Bank staff calculations based on matched data from the MoEYS database on final grade 12 national exam results and data on pre-service (primary) teacher trainees.

Note: Not all trainee names could be matched with names on the final exam registry; for a description of the methodology and limitations, see Appendix 12.4.

60. The matched data on trainee exam score percentile ranking suggests a dramatic improvement in the PTTC trainee caliber (that is, final exam score) compared to 2012. The 2012 PTTC trainee self-reported data suggests that in that year only around 13 percent of PTTC trainees were in the top 20 percentile rank of the final grade 12 national exam, compared to 91 percent in 2015 and 88 percent in 2024.³⁰ The 2014 'matched' percentile data is less reliable (only half of the 2014 PTTC trainee percentile ranks could be retrieved; see Appendix 12.4 for a description of the methodology) but this suggests a pattern consistent with the lower scores from the 2012 self-reported data. Moreover, the recruitment in 2021 witnessed a sharp decline in high-performing students, as only 5 percent of successful candidates were in the top 5 percentile of the final grade 12 national exam. In 2021, the grade 12 national exam was delayed and took place after the new round of teacher training recruitments. As a result, most teacher training applicants were graduates from preceding years.

²⁹ As the share of students by grade (A to F) varies across years, the percentile rank is a more accurate indicator.

³⁰ In 2012, 13 percent of PTTC trainees claimed to have scored a C, which ranks them in the top 19 percentile. The remaining 87 percent report a score of D or lower, which ranks them in the bottom 81 percentile.

61. Furthermore, the matched data shows that although female primary school teacher trainees outnumber male trainees two to one; their average percentile ranks are more or less equal within each year; see Figure 18. This suggests that although teaching in primary schools appears to be particularly attractive to female graduates, high-performing male candidates are also applying. Over the past 10 years, female teacher trainees have outnumbered their male counterparts by a ratio of approximately two to one. In 2024, nearly two-thirds (65 percent) of successful candidates were female. However, the percentile rankings suggest that the academic performance of male and female teacher trainees in the final grade 12 national exam is comparable.

100 93 80 84 83 84 60 40 20 \cap 2017 2018 2024 Year 2014 2015 2016 2019 2021 ■ Female (Percentile) ■ Male (Percentile)

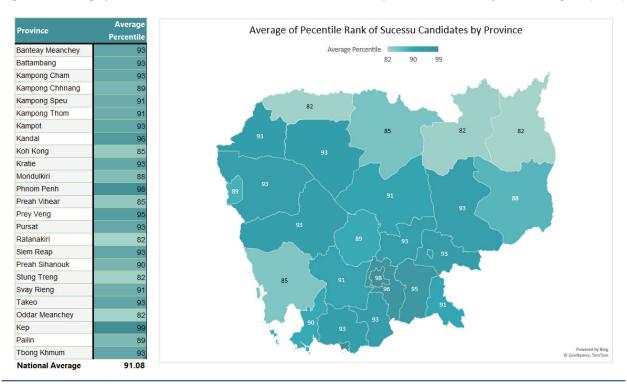
Figure 18: Average percentile rank score for female and male primary school teacher trainees 2014 to 2024

Source: World Bank staff calculations based on matched data from the MoEYS database on final grade 12 national exam results and data on pre-service (primary) teacher trainees.

Note: Not all trainee names could be matched with names on the final exam registry; for a description of the methodology and limitations, see Appendix 12.4.

62. In 2024, the average percentile rank of teacher trainees nationwide was 91 and varied across provinces, from 82 in remote northern provinces to 98 in Phnom Penh and 99 in Kep; see Figure 19. The provinces with the highest average percentile ranks included Kep (99), Phnom Penh (98), Kandal (96), and Prey Veng (95). The average for candidates from the six provinces labeled as 'remote' (by the MoEYS) was approximately 85, and in some northern provinces, candidate averages were as low as 82. However, although average percentile ranks in remote provinces (including Pailin, Mondulkiri, Preah Vihear, Koh Kong, Stung Treng, Oddar Meanchey, and Ratanakiri) were lower than the national average, only a small proportion of their trainees fell in the bottom 50 percentile. The lower performance of candidates in remote provinces does not necessarily indicate that teaching careers in these areas are unattractive. Rather, it reflects the limited number of high-performing students from these provinces. Importantly, the percentile rank scores are based on the national pool of final grade 12 exam scores. Teacher trainees in remote provinces on average still rank 85th nationwide.

Figure 19: Average percentile rank score of teacher trainees across the provinces where they will be assigned (2024)



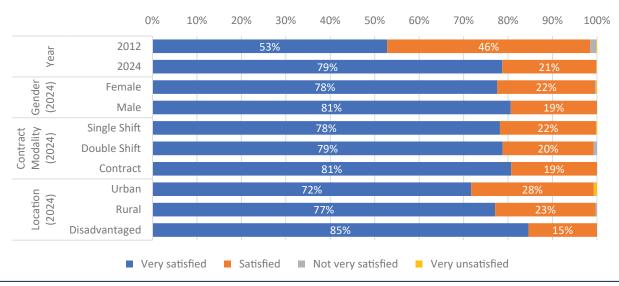
Source: World Bank staff calculations based on matched data from the MoEYS database on final grade 12 national exam results and data on pre-service (primary) teacher trainees.

Note: Not all trainee names could be matched with names on the final exam registry; for a description of the methodology and limitations, see Appendix 12.4.

4.3 Teacher Job Satisfaction and Motivation

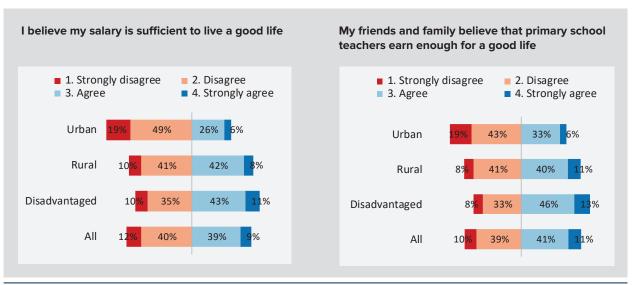
63. In addition to improvements in the number and caliber of teacher applicants, teachers themselves also report being more satisfied with their careers in 2024 compared to 2012. In 2024, 79 percent of teachers indicated they were 'very satisfied' with their occupation, compared to 53 percent in 2012; see Figure 20. Variations on self-reported satisfaction were marginal across genders and contract modalities, and teachers in disadvantaged areas rated their satisfaction higher than rural and urban teachers.

Figure 20: Teacher self-reported satisfaction rating



64. Despite the remuneration reforms, less than half of the teachers (48 percent) believed their salaries were sufficient to 'live a good life and support their families'; see Figure 21. This sentiment was particularly low among teachers in urban areas, with only 32 percent expressing satisfaction, compared to 50 percent in rural areas and 55 percent in disadvantaged regions. Similarly, half (51 percent) of the teachers surveyed reported that their friends and families believed primary school teachers earned enough to lead a good life and care for their families. Once again, teachers in disadvantaged areas were more positive about teacher salaries than their urban counterparts.

Figure 21: Teacher perception of primary school teacher salary



- 65. Yet the teacher concerns over low pay decreased significantly, compared to 2012, and concerns over excessive workload also declined. In 2012, 59 percent of teachers cited low pay as the aspect they liked the least regarding teaching jobs; see Figure 22. This concern over low pay declined to 11 percent in 2024. In 2012, 7 percent of teachers cited excessive work as a factor they were not happy with in teaching jobs, but in 2024, this rate dropped slightly to 5 percent. Only 2 percent of contract teachers raised concerns about the workload, while 11 percent of urban teachers cited it as the aspect they liked the least.
- 66. However, teachers are reluctant to identify improved pay rates as their primary motivation for joining the teaching profession. Only 2 percent of teachers surveyed cited good pay as the main reason for entering the teaching profession both in 2012 and 2024. Instead, most teachers in the 2024 survey indicated they joined the profession because they liked teaching (55 percent) or because of the 'importance of education' (30 percent). In the 2012 and 2024 surveys, almost all teachers reported that teaching was their first choice.

Figure 22: Teachers' perception of teaching career

				Gender		der	Contract Modality				Location					
	2012		2024	Fema	le	Male		ngle Shift	Doubl Shift	e Co	ntract	Ur	ban	Rural	ſ	Dis
Teaching was first choice	98%		97%	97%		97%	97%	ó	98%	979	6	97%		97%	97%)
What job aspects do you like least?																
Low pay	59%		11%	8%		16%	12%	ó	15%	4%		12%		12%	10%)
Low recognition	2%	Ī	5%	6%		4%	5%		8%	5%		9%		5%	4%	
Few opportunities for professional development	1%		1%	1%		1%	1%		1%	1%		0%		2%	1%	
Excessive workload	7%		5%	5%		4%	5%		5%	2%		11%		2%	4%	
Living far away from family	N/A		2%	2%		1%	2%		2%	1%		1%		2%	2%	
No aspect I am not happy	1%		59%	61%		56%	56%	ó	58%	759	6	50%		60%	62%)
None of above	22%		17%	17%		18%	20%	ó	13%	129	6	18%		17%	17%)
l don't know	8%		0%	0%		0%	0%		0%	0%		0%		0%	0%	
Main reason became teacher:			_													
Likes teaching	54%		55%		3%	50%		54%			64%		53%			519
Importance of education	23%		30%		7%	36%		30%			26%		32%			339
Job security/stability	5%		2%		1%	2%		1%	1	%	1%		1%		%	20
Social respect	2%		1%		1%	0%	4	0%		%	1%	1	0%		%	00
Good pay	2%	Ţ.	2%		2%	2%	Ţ	2%		%	4%	Ų	1%		%	40
Lack of better option	0%		4%		1%	5%		5%		%	0%		5%		%	4
Unable to pursue study	0%		1%		1%	2%		2%		%	1%		1%		%	29
Family tradition	5%		4%	7	5%	2%		5%	1	%	2%		5%		%	49
None of above	11%		2%	2	2%	1%		2%	2	%	2%		3%	2	%	19
Obs.	676	727	,	454		273	481		132	114	1	145		328	254	

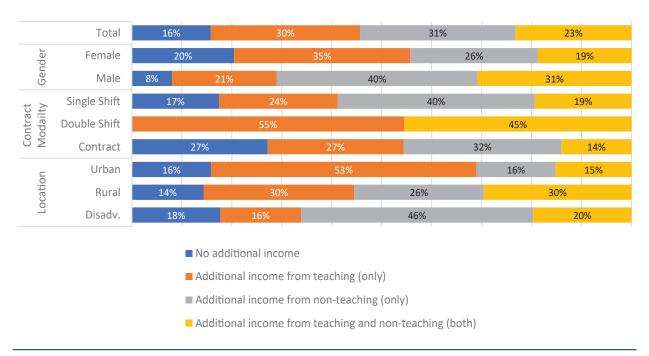
Teacher Secondary Jobs 5

67. This section analyzes teacher self-reported data on secondary jobs and income, collected through the 2024 and 2012 teacher and school surveys. Secondary jobs are not uncommon in low-income countries where public school teachers need to supplement their income to meet basic needs. However, they are also assumed to adversely affect performance of the teacher's primary job at a public school. This section examines if the teacher remuneration reforms in 2013 and the sharp increase in teacher pay have resulted in a decrease in secondary jobs among public primary school teachers—and thus presumably more effort in their primary function as public school teachers. The first subsection describes data on work and income from teaching and nonteaching jobs, focusing on different teacher categories (gender, contract modality, and location). The second subsection describes work and income from different categories of teaching jobs, including private tutoring, double-shift teaching, and teaching at a private school.

5.1 Additional Work and Income - By Teacher

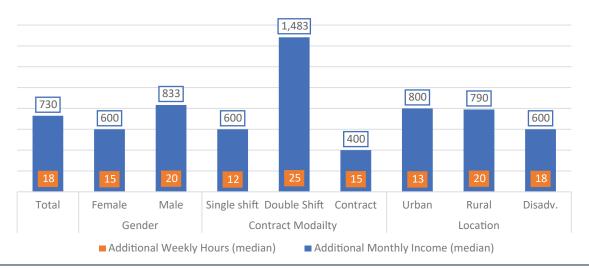
68. Earning income through additional work (outside of their regular teaching jobs) continues to be common for primary school teachers, only one out of six (16 percent) teachers reported not having any additional income in 2024. In the 2024 survey, 23 percent of teachers report earning additional income through both teaching and non-teaching work. Another 30 percent of teachers report earning additional income only through teaching (including private tutoring, working a double shift, and teaching at a private school), and another 31 percent report earning additional income only through non-teaching work (typically farming or working as a shopkeeper); see Figure 23. Importantly, these are teacher self-reported percentages and likely underestimate actual additional work and income (due to the Social Desirability Bias: teachers are legally not permitted to work besides their regular civil servant jobs and are typically aware of this condition).

Figure 23: Teacher additional income from teaching, non-teaching, or both, by gender, contract modality, and location (2024)



- **69.** The self-reported prevalence of teacher secondary jobs has not changed significantly since 2012 despite the introduction of teacher remuneration reforms.³¹ However, there are some income and additional work variations across gender, contract modality, and location. Only 8 percent of male teachers reported no additional income, compared to 20 percent of female teachers (likely reflecting the cultural practice of additional household work for female teachers). Male teachers more often report income through non-teaching jobs. Double-shift teachers (by definition) earn additional income through teaching, but a striking 45 percent of double-shift teachers also report income through non-teaching (that is, in addition to working two shifts at a public primary school). Moreover, additional income through teaching is more common in urban areas compared to rural and disadvantaged areas. However, these variations merit a more detailed analyses of subcategories of teaching (see subsection 5.2).
- **70.** Primary school teachers typically work an additional 18 hours per week (=median), besides their regular teaching job, earning a total of KHR 730,000 (US\$183 [=median]).³² Male teachers report working more hours and earning more additional income. Double-shift teachers report total additional earnings significantly higher than single-shift and contract teachers. And urban teachers report total earnings slightly higher than rural teachers but for significantly fewer hours per week; see Figure 24.

Figure 24: Teacher self-reported additional weekly hours worked (median) and additional monthly income (median), by gender, contract modality, and location (2024)



Source: 2024 World Bank Teacher and School Survey.

71. Moreover, primary school teachers report earning on average KHR 12,078 (US\$3) per additional hour worked. Average self-reported hourly wages are higher for male teachers (KHR 13,088 [US\$3.27]) than female teachers (KHR 11,276 [US\$2.82]). Urban teachers report earning more per hour (KHR 14,219 [US\$3.55]) than rural and disadvantaged area teachers (KHR 11,531 [US\$2.88] and KHR 11,764 [US\$2.94], respectively). Contract teachers report earning hourly wages (KHR 7,334 [US\$1.83]) almost half that of double-shift teachers (KHR 14,197 [US\$3.55]) and also significantly less than single-shift teachers (KHR 12,124 [US\$3.03]). Please note, however, that this indicator is vulnerable to outliers and data entry error.

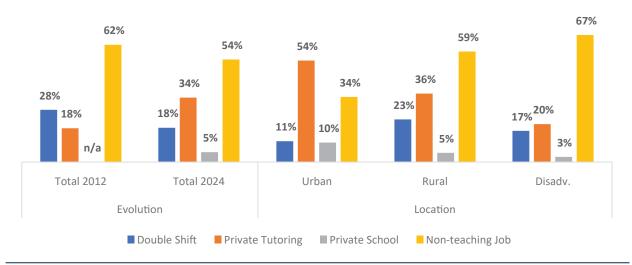
The 2012 survey did not collect exhaustive data on additional income. It collected data on double shifts and private tutoring as well as non-teaching jobs but did not collect exhaustive data on teaching income (for example, private school teaching and community funded or voluntary teaching).

lndicators such as self-reported additional 'monthly income' and 'weekly hours worked' are both vulnerable to reporting outliers (for example, exaggeration) and data entry errors. Therefore, *means* are presented here (meaning half of teachers report equal or more, and half reported equal or less) rather than averages.

5.2 Additional Work and Income - By Source

- **72.** Self-reported private tutoring almost doubled between 2012 and 2024, from 18 percent to 34 percent, while double-shift teaching declined considerably, and non-teaching jobs decreased somewhat.³³ In the 2024 survey, one-third (34 percent) of primary school teachers reported earning additional income through private tutoring, 18 percent reported working a double shift, 5 percent reported working at a private school, and 54 percent reported earning additional income through a non-teaching job (typically as a farmer or shopkeeper); see Figure 25.³⁴ Teachers in rural areas more often report double-shift teaching (23 percent) than teachers in disadvantaged areas (17 percent) and urban teachers (11 percent). The overall decline in self-reported double-shift teaching is consistent with HR data on the teacher workforce composition (that is, a steep increase in contract teacher positions at the expense of double-shift positions; see section 2).
- 73. Private tutoring and additional work at private schools are more common in urban areas, whereas teachers in rural and disadvantaged areas more often report non-teaching jobs (and double shifts). More than half (54 percent) of urban primary school teachers indicate they earn additional income through private tutoring and 10 percent report working at a private school, compared to 36 percent and 5 percent, respectively, for rural teachers, and 20 percent and 3 percent, respectively, for disadvantaged area teachers. Conversely, 67 percent of disadvantaged area teachers report additional income from non-teaching jobs, compared to only 34 percent by urban teachers.

Figure 25: Percentage of teachers reporting additional income from different sources (teaching and non-teaching) and evolution (2012–2024) and by location (2024)



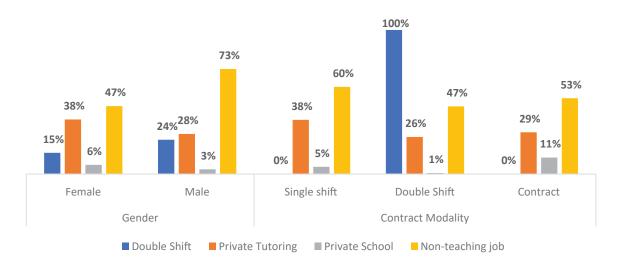
Source: 2012 and 2024 World Bank Teacher and School Surveys.

74. Female teachers more often report generating income from private tutoring (38 percent) and teaching at private schools (6 percent) compared to male teachers (28 percent and 3 percent, respectively). Conversely, male teachers more often report generating income from non-teaching jobs (73 percent) and double-shift teaching (24 percent), compared to female teachers (47 percent and 15 percent, respectively); see Figure 26. Finally, contract teachers are not allowed to work an additional (that is, double) shift at schools.

³³ The 2012 survey did not collect data on teacher additional work at private schools.

³⁴ Please note these percentages can add up to more than 100 percent as teachers report on multiple sources of additional income.

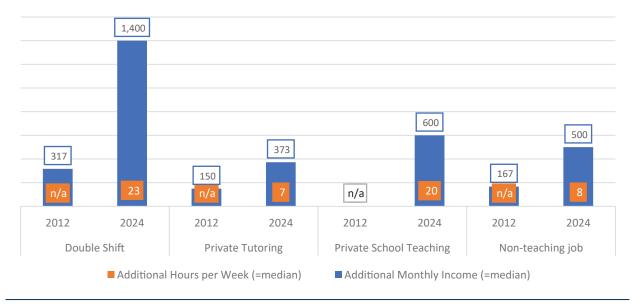
Figure 26: Percentage of teachers reporting additional income from different sources (teaching and non-teaching), by gender and contract modality (2024)



Source: 2012 and 2024 World Bank Teacher and School Surveys.

75. In 2024, public primary school teachers reported earning an additional KHR 1,400,000 (US\$350 [=median]) from double-shift teaching (for an additional 23 hours work per week), a 342 percent increase compared to KHR 317,000 (US\$79.3) in 2012; see Figure 27. This corresponds to the increase in primary school teachers' starting salary during this period and the MoEYS regulation tying double-shift allowances to full starting salaries. Median self-reporting monthly income from private tutoring totaled KHR 373,000 (US\$93.3) in 2024 (for a median 7 hours of additional work), a 148 percent increase compared to KHR 150,000 (US\$37.5) reported in 2012. The median reported monthly income from teaching at a private school is KHR 600,000 (US\$150) for an additional 20 hours of work (=median) per week.³⁵

Figure 27: Teacher self-reported additional weekly hours worked (median) and additional monthly income (median) by source (2012 and 2024)



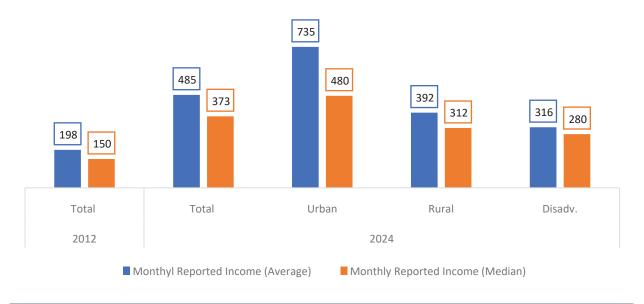
³⁵ Data on private school teaching income were not collected in 2012.

- 76. Average reported hourly income for additional work varies considerably across secondary jobs, with double-shift income the highest (KHR 15,256 [US\$3.81] per hour) and private school teaching income the lowest (KHR 8,390 [US\$2.10] per hour). Self-reported income from private tutoring averaged KHR 12,206 (US\$3.05) per hour. Male teachers reported significantly higher hourly income from private tutoring compared to female teachers. While double-shift allowances are fixed and thus the same across locations and genders, the number of hours and income are not fixed across other secondary jobs.
- 77. Urban teachers reported an average hourly income from private tutoring more than double that of rural and disadvantaged area teachers and considerably higher hourly income from private school teaching (although the sample of teachers earning additional income at private schools is too small to affirm this).

Private Tutoring

78. Average additional monthly income from private tutoring has increased from KHR 198,000 (US\$49.5) in 2012 to KHR 485,000 (US\$121) in 2024, a 145 percent increase, and urban teachers report almost double the private tutoring income compared to rural and disadvantaged area teachers; see Figure 28. The average number of students in a private tutoring class in 2024 is 17 (and the median number is 15), the same as in 2012, and there are no significant differences between urban, rural, and disadvantaged areas. However, monthly reported income from tutoring and thus student fees for tutoring vary. Urban tutoring fees average KHR 46,000 (US\$11.5 [median monthly fee is KHR 30,000 or US\$7.5]), compared to average rural fees of KHR 23,000 (US\$5.75 [median monthly fee is KHR 18,000 or US\$4.5]) and average disadvantaged area fees KHR 20,000 (US\$5.0 [median monthly fee is KHR 17,000 or US\$4.5]). The bulk of private tutoring classes takes place either at the teacher's school (44 percent) or the teacher's home (41 percent). Around 18 percent of classes are organized in another private home and the remaining 4 percent in other facilities.

Figure 28: Teacher self-reported private tutoring monthly additional income (average and median) and evolution (2012 and 2024) and by location (2024)



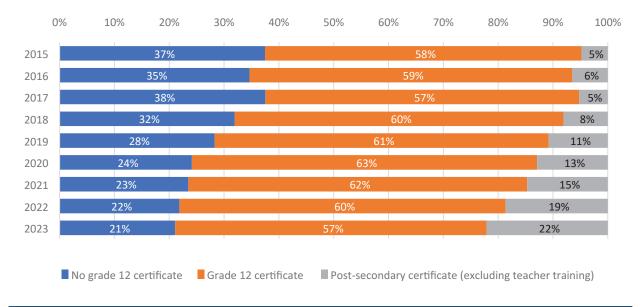
6 Teacher Qualifications

79. This section describes primary teacher education qualifications, in terms of upper-secondary (grade 12), 2-year pedagogic training, and post-secondary (non-pedagogic) completion rates, as well as total years of schooling. The section analyzes multiyear trends as well as age-cohort and provincial disparities, based on the MoEYS' HRMIS data, the largest dataset available on teacher education qualification.³⁶ However, because the HRMIS lacks details on pedagogic training, this section first analyzes HRMIS data and thereafter analyzes 2024 survey data to describe pedagogic training and total years of schooling disparities between teacher genders, contract modalities, location and age cohorts.

6.1 Grade 12 and Post-Secondary Completion Rates

80. In 2023, 79 percent of civil servant primary school teachers held a 'grade 12 certificate' and 22 percent held a (non-teacher training) 'post-secondary degree', according to HRMIS data.37 This is a significant increase compared to 2015, when only 63 percent of civil servant primary school teacher held a 'grade 12 certificate' qualification and only 5 percent a non-teacher training post-secondary degree; see Figure 29. The bulk (93 percent) of post-secondary degrees obtained by primary school teachers are bachelor's degrees (that is, a 4-year degree at a university), whereas the remainder includes both master's degrees (2 years at university), higher diplomas (2 years), associate degrees (2 years), and doctor of philosophy degrees (PhDs).

Figure 29: Percentage of civil servant primary school teachers by education qualification: no grade 12 certificate, grade 12 certificate, and post-secondary certificate (2015 to 2023)



Source: MoEYS HRMIS multiyear data on teacher staff at primary schools.

There are some apparent issues with this HRMIS dataset, importantly a decline of grade 12 completion rates between 2015 and 2016 (which is unlikely to happen). The reasons for this are not clear, but it could potentially be related to recoding or re-categorization within the dataset.

The rate of upper-secondary completion is slightly higher for female civil servant teachers (81 percent) than for male civil servant teachers (75 percent), according to the 2023 HRMIS data, and double-shift teachers have a slightly higher completion rate (82 percent) than single-shift teachers (78 percent).

- 81. This increase in grade 12 completion rates among primary school teachers can largely be attributed to attrition and replacement and will continue to improve in the coming decade. The rate of grade 12 completion is considerably higher for younger 'new' teachers (95 percent) compared to older 'retiring' teachers (44 percent) (see Figure 30), resulting in significant improvements year-on-year.³⁸
- 82. However, the sizable increase in (non-teacher training) post-secondary degree completion rates can mostly be attributed to in-service 'upgrading' of education qualifications (that is, inservice teachers obtaining a post-secondary degree during their tenure). In the 2024 survey, 31 percent of teachers reported having obtained a post-secondary degree after becoming a teacher, and another 9 percent reported being enrolled in a degree program at the time of the interview. In-service teachers typically pursue a bachelor's degree without the support or facilitation of the MoEYS. There are significant differences between the HRMIS data on post-secondary degrees and the 2024 survey data, potentially resulting from teachers not reporting their certificates or a delay in the registration of these certificates into the HRMIS.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 20-29 22% 31% 30-39 40-49 22% 24% 50-59 57% 8% ■ No grade 12 certificate ■ Grade 12 certificate ■ Post-secondary certificate (excluding teacher training)

Figure 30: Education qualifications (excluding teacher training) by age cohort (2023)

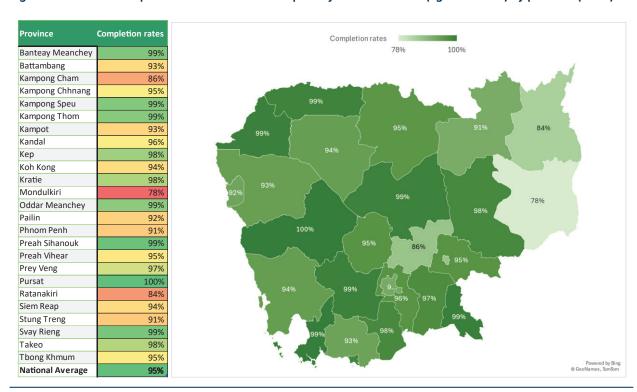
Source: MoEYS HRMIS multiyear data on teacher staff at primary schools.

- 83. Grade 12 completion rates of civil servant primary school teachers vary across Cambodia's provinces (typically between 70 to 90 percent). According to the 2023 HRMIS data, the highest upper-secondary completion rates of primary school teachers are found in Kep (94 percent), Siem Reap (89 percent), and Pailin (89 percent), and the lowest rates are found in Kampong Cham (65 percent), Mondulkiri (67 percent), and Ratankiri (70 percent).
- **84.** However, provincial disparities in grade 12 completion rates have declined and will continue to decline in the coming years. The 'bottom' 13 provinces (in 2015) rose on average by 22 percent in 2023, compared to 13 percent in the 'top' 12 provinces and 16 percent overall. The bottom 5 provinces even rose on average by as much as 30 percent. The disparities between provinces have declined and will continue to decline due to higher completion rates of younger teacher cohorts.

³⁸ In 2023, 95 percent of the youngest cohort of teachers (ages 20–29, *n* = 12,664) completed upper-secondary education, which replaced the oldest teacher cohort (ages 50–59, *n* = 4,043) in 2015 with only 21 percent upper-secondary completion rate. In absolute terms, the number of civil servant teachers with a 'grade 12 certificate or higher' qualification rose from 31,960 in 2015 to 39,228 in 2023—an increase of 7,268. Most of this increase can be attributed to attrition and replacements, although some teachers might have obtained their grade 12 degrees after starting their teaching careers.

85. As attrition is the primary driver of improvements in *upper-secondary completion rates* of civil servant primary school teachers, it is key that all provinces succeed in attracting new teachers with grade 12 certificates. In most provinces, almost all (that is, 95 to 100 percent) of the younger cohort of teachers (ages 20–29) have obtained a grade 12 degree, according to the 2023 HRMIS data. Significantly, even in some of the provinces labeled 'disadvantaged' by the MoEYS, completion rates of the younger cohort are high (99 percent in Oddar Mneachey, 95 percent in Preah Vihear, and 94 percent in Koh Kong). However, in some provinces, grade 12 completions rates of the youngest teacher cohort (ages 20 to 29) are still well below 95 percent, suggesting they continue to struggle with attracting grade 12 qualified teachers. Most notably, in Mondulkiri (78 percent), Ratanakiri (84 percent), and Kampong Cham (86 percent) provinces, grade 12 completion rates among the younger cohort of teachers remains low; see Figure 31.

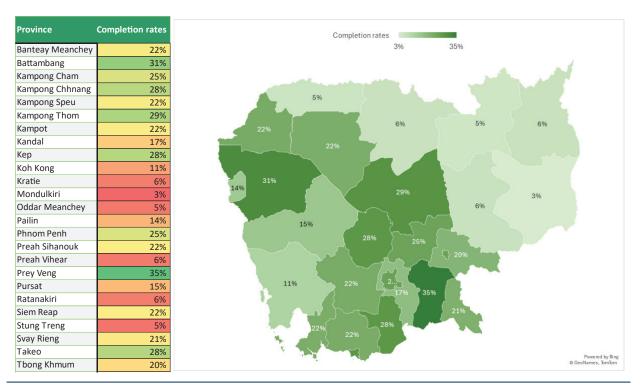
Figure 31: Grade 12 completion rates of civil servant primary school teachers (ages 20 to 29) by province (2023)



Source: MoEYS HRMIS data (2023) on teacher staff at primary schools.

86. Conversely, there is more variation in post-secondary degree rates of primary school teachers across provinces, and disparities are *increasing*. According to the 2023 HRMIS data, the highest post-secondary completion rates of primary school teachers are found in Prey Veng (35 percent), Battambang (31 percent), and Kampong Thom (29 percent), and the lowest rates are found in Mondulkiri (3 percent), Stung Treng (5 percent), and Odar Meanchey (5 percent); see Figure 32. Moreover, disparities are increasing as the 'bottom' 13 provinces in 2015 rose on average by 14 percent in 2023, compared to 18 percent in the 'top' 12 provinces and 17 percent overall. The bottom 5 provinces rose only as little as 5 percent on average. Without additional policy interventions, provincial disparities are not expected to decline, as attrition and replacement is not equalizing disparities across provinces.

Figure 32: Post-secondary completion rates of civil servant primary school teachers (all ages) by province (2023)

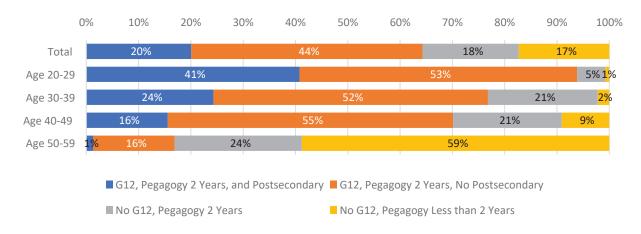


Source: MoEYS HRMIS data (2023) on teacher staff at primary schools.

6.2 Pedagogic Qualifications (Pre-service Teacher Training)

- 87. Almost two-thirds (64 percent) of civil servant primary school teachers are qualified according to the current qualification standards (known as '12+2', a grade 12 certificate plus a 2-year pedagogic degree), according to the 2024 survey data. At least 20 percent of primary school teachers are qualified and have an additional post-secondary degree (typically a bachelor's degree), and 44 percent just meet the current minimum qualifications standards (12+2); see Figure 33. Out of the remaining 36 percent of 'underqualified' primary teachers, half have completed 2 years of pedagogic training (but do not have a grade 12 certificate), whereas the remainder have not obtained a grade 12 certificate and did not complete 2 years of teacher training.
- 88. Teacher age is an important moderator that needs to be considered when reviewing qualification disparities across gender, contract modalities, and teacher location (that is, urban, rural, and disadvantaged areas). Teacher age is the best predictor of minimum qualification rates; 94 percent of younger teachers (ages 20-29) meet the qualifications requirements compared to only 17 percent of older teachers (ages 50-59). Most of the teachers ages 30 to 49 have completed 2 years of pedagogic training, but around one-quarter have not completed upper-secondary education. However, most teachers in the oldest cohort (ages 50-59) did not complete 2 years of pedagogic training. The rate of qualified teachers (12+2) will continue to rise in the coming years, when qualified new teachers replace underqualified retiring teachers. It will be key to ensure primary schools across all provinces are able to attract qualified teachers so that attrition and replacement will eventually phase out underqualified teachers. Moreover, it will be key to ensure the quality of training consistently across all PTTC degrees.

Figure 33: Education qualification (including pedagogic training) of civil servant primary teachers by age cohort (2024)



Source: 2024 World Bank Teacher and School Survey.

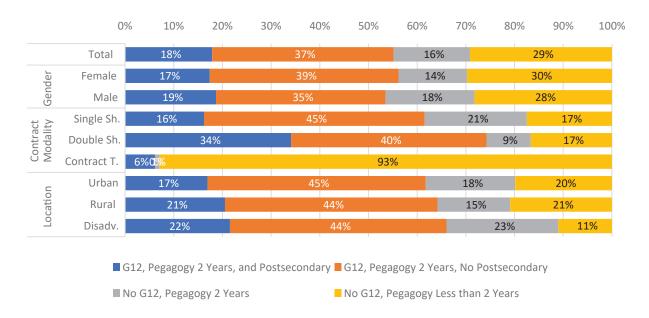
Note: Data includes civil servant teachers but exclude contract teachers.

- 89. Contract teachers are somewhat unique in the teacher workforce in terms of pedagogic qualifications, as 90 percent of contract teachers did not receive *any* formal (1- or 2-year) pedagogic training, and only 6 percent have completed 2 years of pedagogic training; see Figure 34. This is not surprising given that over the past decade, access to pre-service teacher training has been restricted to candidates applying for civil servant positions. However, although contract teachers lack pre-service teacher training, 91 percent have completed upper-secondary education and almost half (49 percent) have obtained a post-secondary degree (typically a bachelor's degree), the highest rate across age cohorts and contract modalities, which contradicts a commonly held perception that contract teachers are less qualified than their civil servant colleagues.³⁹ Moreover, it is important to note here that a considerable section of the teacher workforce (that is, contract teachers) lack pedagogic training and qualifications due to the restricted access to pedagogic training facilities rather than their inability to access upper-secondary or post-secondary education more generally.
- **90.** Double-shift teachers have (on average) higher education qualifications than their single-shift colleagues, which is an encouraging sign, suggesting that better-qualified teachers are prioritized when selecting teachers for additional shifts. In the 2024 survey, 74 percent of double-shift teachers met the minimum qualification requirements and 34 percent had an additional post-secondary degree, compared to 62 percent and 16 percent for single-shift teachers, respectively. Gender and location disparities in terms of education qualifications are fairly small and moderated by teacher age (that is, male and urban teachers are older and more often slightly underqualified).

³⁹ Note that this effect is moderated by teacher age.

⁴⁰ Note that this effect is moderated by teacher age.

Figure 34: Education qualifications (including pedagogic training) of primary school teachers by gender, contract modality, and location (2024)

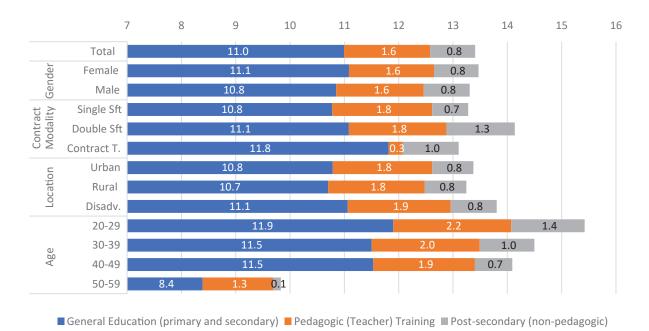


Source: 2024 World Bank Teacher and School Survey.

Note: Contract teachers are excluded from the data on teachers by location.

91. Data collected from the 2024 survey on total years of schooling demonstrates the importance of age as a moderating factor. Younger teachers have more years of general education, pedagogic training, and post-secondary education than older teachers; see Figure 35. The youngest teacher cohort (ages 20 to 29) have on average almost 15.5 years of total schooling, compared to less than 10 years of total schooling for the oldest cohort.

Figure 35: Education qualifications (including pedagogic training) of primary school teachers by gender, contract modality, and location (2024)



Source: 2012 and 2024 World Bank Teacher and School Surveys.

Note: Contract teachers excluded from data on age cohort and location.

7 Teacher Continuous Professional Development

92. This section discusses the MoEYS' policies and framework related to teacher CPD and the findings from the analysis of survey data related to teacher CPD, including in-service teacher training activities, on-site (school cluster based) CPD, and career pathways. There is no comprehensive MoEYS database on in-service training, although the Continuous Professional Development Management Office (CPDMO) has started recording credit-based training in recent years. Data described in this section comes primarily from the World Bank's 2024 Teacher and School Survey.

7.1 CPD Policy Framework

- 93. Cambodia has demonstrated a strong commitment to upgrading teacher qualifications and knowledge by establishing a series of comprehensive policies and frameworks related to teacher CPD. These policies aim to enhance teacher qualifications and knowledge, address the quality of education, and ensure that teachers are well-equipped to meet the evolving demands of the education system. The *Teacher Policy* (2013) sets the foundation of this framework by emphasizing the need for teachers to possess a balance of knowledge, skills, behavior, and professional ethics. It aims to ensure quality pre-service training and provide regular in-service training and professional development opportunities. Building on this foundation, the *TPAP 2015–2020* outlines strategic activities to improve teacher education and professional development. This includes upgrading teacher training colleges, implementing accelerated training programs for teachers to attain bachelor's degrees, and creating mechanisms to recognize and reward highperforming teachers.
- 94. The Policy on Continuous Professional Development for Education Staff (2017) envisions a culture of lifelong learning and continuous improvement for all education staff. It outlines strategies for the development and implementation of a robust CPD framework, underscoring the importance of having regular in-service training, upgrading professional qualifications, and linking CPD to teacher career pathways (TCPs). In line with this policy, the CPD Framework for Teachers and School Directors (2019) and the CPD Handbook (2021) provide detailed guidelines for the operationalization of CPD activities. These policy documents introduce a credit-based CPD system to incentivize teachers to participate in CPD activities and align them with career advancement.
- 95. As part of the CPD policy, the MoEYS has introduced a credit-based CPD system to make CPD more systematic. Credit-based CPD is currently managed by the CPDMO, which was established under the MoEYS Department of Personnel in 2020. This office serves as the central agency responsible for overseeing and regulating credit-based CPD delivery and is responsible for recording the credits acquired by teachers in a registry. Credit-based training is provided by CPD providers (accredited by the CPDMO), including teacher training institutions (TTIs), DPs, or technical departments of the MoEYS. In 2021, the CPDMO launched the MoEYS human resource continuous professional development (HRCPD) mobile app, enabling teachers to create accounts, enroll in credit-based CPD training courses, and have their earned credits recorded on the system.
- 96. Most teachers (55 percent) surveyed in 2024 were unaware of a credit-based CPD system managed by the CPDMO; see Figure 36. However, 32 percent of teachers reported they had created an HRCPD account, and 5 percent of teachers surveyed (or 15 percent of those reported to have created an account) had participated in CPDMO-accredited courses. Notably, male teachers reported a higher CPDMO-accredited training participation rate (7 percent) than female teachers (3 percent).

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% ₹ All (n=727) 5% 27% Female (n=454) 59% 26% Gender Male (n=273) 29% Single Shift (n=481) 30% Double Shift (n=132) 64% 22% Contract (n=114) 69% 19% Urban (n=145) 54% 28% _ocation Rural (n=328) 26% Disadvantaged (n=254) 28%

■ Only have CPDMO Account

■ Have taken CPDMO Training

Figure 36: Teacher awareness and participation in credit-based CPD

Source: 2024 World Bank Teacher and School Survey.

Only heard of it

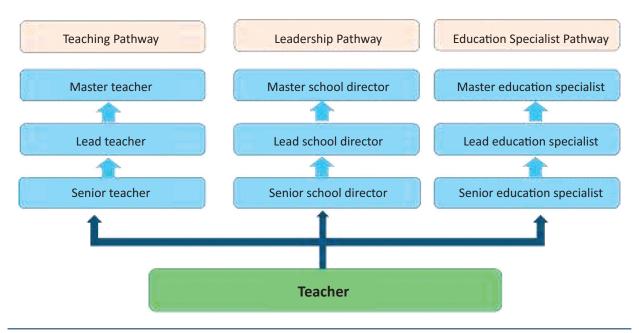
■ Never heard of it

97. Moreover, despite most (if not all) teachers engaging in some form of CPD activities, nearly half of the teachers (47 percent) surveyed in 2024 had not heard of the term CPD (Khmer: ការអភិវឌ្ឍវិជ្ជាជីវៈជាប្រចាំ). This lack of awareness is consistently observed across teacher gender, school location, and contract modality. Additionally, only 15 percent of teachers reported having a CPD plan. More male teachers (16 percent) reported having CPD plans than female teachers (14 percent), with minimal differences between teachers by employment modality and location. Those reporting to be familiar with TCPs were also more likely to report having CPD plans (21 percent). However, this also indicates that about three-fourths of teachers familiar with career pathways do not have plans for their CPD activities. This finding is similar to the results from the school director survey, where only 41 percent of school directors said their school requires teachers to prepare CPD plans, and only 17 percent of the sampled schools reported that nearly all teachers have CPD plans.

Teacher Career Pathways

98. In 2018, the MoEYS adopted the Teacher Career Pathways Policy, which establishes a framework for different teacher career tracks. The policy identifies three different track options: (a) professional teachers (teaching track), (b) educational leaders (leadership track), and (c) teacher educators (education specialist track); see Figure 37. According to the Master Plan for Teacher Qualification Upgrade 2021–2025, progression along the pathways is determined by five appraisal criteria: qualification level, experience, achievements, professional outcomes, and professional competence. CPD contributes directly to qualifications and professional competence and indirectly to achievements.

Figure 37: Teacher Career Pathway



Source: MoEYS Teacher Career Pathway Framework 2021.

- 99. In the teaching track, teachers who meet the necessary criteria can advance from 'Teacher' to 'Senior Teacher'. Some may further progress to the roles of 'Lead Teacher' and eventually 'Master Teacher.' Advancement within each stage of the career pathway is linked to incremental increases in the functional allowances and is initiated by annual appraisal outcomes. These appraisals, conducted by TCP committees, consider various factors, including the successful completion of individual annual professional development plans. However, this framework has not yet been fully implemented, and as of 2024, only a small fraction (less than 1 percent) of teachers and principals were promoted across the pathway (according to the HRMIS).
- 100. In connection with the TCPs, the MoEYS has encouraged teachers to enhance their knowledge and skills through both academic and non-academic CPD activities. The CPD system awards credits for a wide range of activities, including higher education courses, teacher education certificates, postgraduate diplomas, and professional development activities such as self-directed learning. To systematize CPD, the MoEYS has introduced a credit-based structured CPD, which is currently managed by the CPDMO. This credit-based training can be provided by Teacher Education Institutions (TEIs), DPs, and technical departments under the MoEYS.
- **101.** Teachers surveyed in 2024 were often unaware of the (teacher) career pathways and very few reported participating in it. At the time of the survey, 61 percent of teachers had never heard of the TCPs, and 33 percent were aware of it but had neither attended any related workshops nor participated in the program. Only 4 percent of teachers reported participating in the career pathways, and 2 percent had attended training related to it but were not participating at the time of the survey; see Figure 38. Female teachers were particularly underrepresented, with only 2 percent reporting participation. None of the contract teachers were involved in the program. Interestingly, urban teachers were less aware of the career pathways, with 69 percent having never heard of it, compared to 59 percent in rural areas and 60 percent in disadvantaged areas. Despite this, urban teachers had a higher participation rate at 5 percent, compared to 4 percent in rural areas and 3 percent in disadvantaged areas.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% <mark>2% 4</mark>% \equiv All (n727) 61% <mark>1%</mark> 2% Female (n=454) Gender 4% 6% 55% Male (n=273) <mark>2% 4</mark>% Single-Shift (n=481) modality Double Shift (n=132) 3% 6% 2% Contract (n=114) 68% 1%5% Urban (n=145) 68% Location Rural (n=328) **2% 4%** <mark>3% 3</mark>% Disadvantage (n=254)

Figure 38: Awareness on and participation in career pathways

Source: 2024 World Bank Teacher and School Survey.

■ Never heard of it

102. More recent policies continue to emphasize the need for ongoing professional development and support for teachers. The Master Plan on Upgrading Education Personnel 2021–2025 outlines a strategic approach to professional development to further enhance teacher competencies. This master plan focuses on developing competencies in pedagogy and subject knowledge through on-site training, distance learning, and scholarships for advanced studies. Additionally, the latest TPAP 2024–2030, building on previous policies and frameworks, aims to create a sustainable and attractive career path for teachers in Cambodia.

■ Only attended its workshop

■ Take part in it

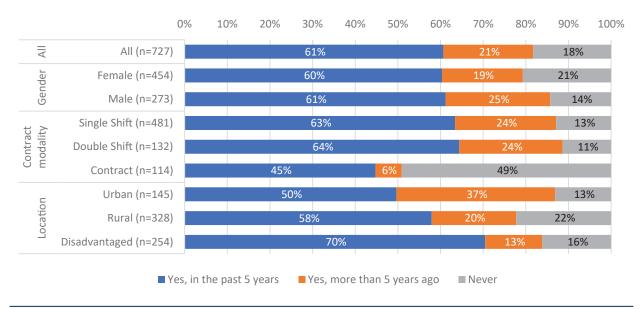
Only heard of it

7.2 In-service Training Courses

Opportunities for In-Service Teacher Training

103. Four out of five (82 percent) primary school teachers have attended *at least one* INSET course since becoming teachers. However, training opportunities have not been distributed equally. For example, only 45 percent of contract teachers reported receiving training *in the past 5 years*, compared to 63 percent for regular single-shift teachers. And 49 percent of contract teachers have *never* attended any training since becoming teachers, compared to 13 percent for regular single-shift teachers; see Figure 39. More than 70 percent of teachers in disadvantaged areas have received training *in the past 5 years*, compared to 50 percent of teachers in urban areas and 58 percent of teachers in rural areas.

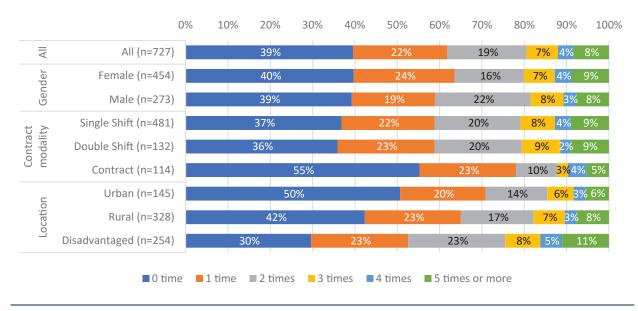
Figure 39: Percentage of teachers receiving INSET after being a teacher



Source: 2024 World Bank Teacher and School Survey.

1.87 per teacher) compared to their urban and rural colleagues (1.14 and 1.48, respectively). Teachers in disadvantaged areas also more often reported attending five or more trainings in the past 5 years, compared to their rural and urban counterparts; see Figure 40. However, there appears to be no significant difference in training opportunities between male and female teachers or between single-shift and double-shift teachers.

Figure 40: Number of training teachers attended in the past 5 years



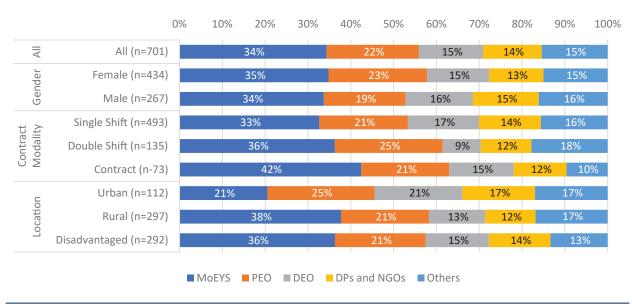
Source: 2024 World Bank Teacher and School Survey.

INSET Characteristics

105. Based on teacher self-reported data in the 2024 survey, 35 percent of the recent in-service training opportunities seem to be provided by the MoEYS, followed by the PEOs (22 percent), DEOs (15 percent), and DPs or nongovernmental organizations (NGOs) (14 percent). Among the 73 INSET courses reportedly attended by contract teachers, 42 percent seem to be provided

by the MoEYS, whereas in urban areas, the MoEYS is less often perceived to be the provider (21 percent); see Figure 41. Teachers recalled that almost all (97 percent) the INSET courses were in person, while online (and hybrid) training accounted for only 3 percent.

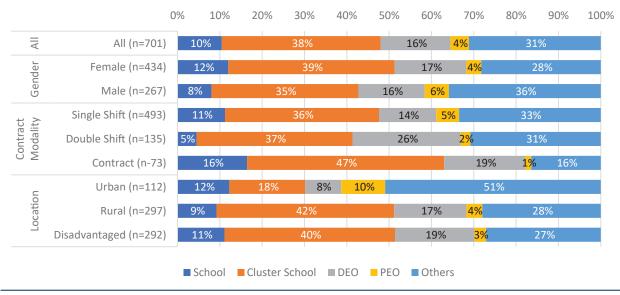
Figure 41: Perceived INSET provider by gender, contract modality, and location



Source: 2024 World Bank Teacher and School Survey.

106. More than one-third (38 percent) of INSET courses took place at cluster schools, while training at the DEOs and the teachers' own schools accounted for 16 percent and 10 percent, respectively. Using cluster schools as training venues was more common in rural and disadvantaged areas (42 percent and 40 percent, respectively) but less so in urban areas (18 percent); see Figure 42.

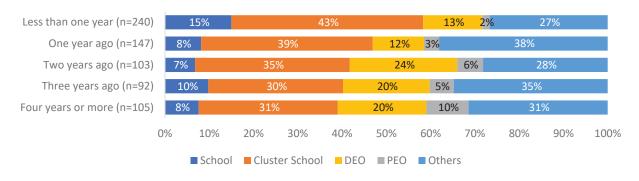
Figure 42: INSET location by gender, contract modality, and location



Source: 2024 World Bank Teacher and School Survey.

107. Over the past 5 years, there appears to be a slight upward trend where in-service teacher training is more often conducted at the teachers' own schools or nearby cluster schools. According to teachers in the 2024 survey, 58 percent of recent training courses (conducted in the past year) took place at their own schools or nearby cluster schools, compared to 39 percent 4 or 5 years ago; see Figure 43.

Figure 43: Teacher self-reported location of INSET course by year

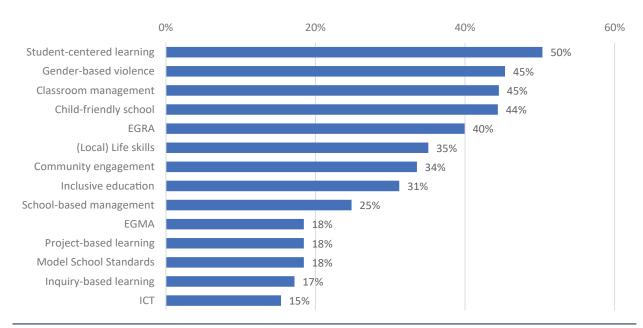


Source: 2024 World Bank Teacher and School Survey.

In-service Teacher Training Topics

108. The topics of INSET courses have evolved over time, as teachers report different topics in recent INSET courses compared to all courses ever attended since becoming a teacher. When teachers list the topics of INSET courses ever attended since becoming a teacher, they mentioned student-centered learning (50 percent of teachers surveyed in 2024), gender-based violence (45 percent), classroom management (45 percent), child-friendly schools (44 percent), and early-grade reading (40 percent); see Figure 44. Topics such as early-grade math (18 percent), project-based learning (18 percent), model school standards (18 percent), inquiry-based learning (17 percent), and ICT (15 percent) are less often mentioned.

Figure 44: Topics of training teachers ever attended in the past (n = 727)

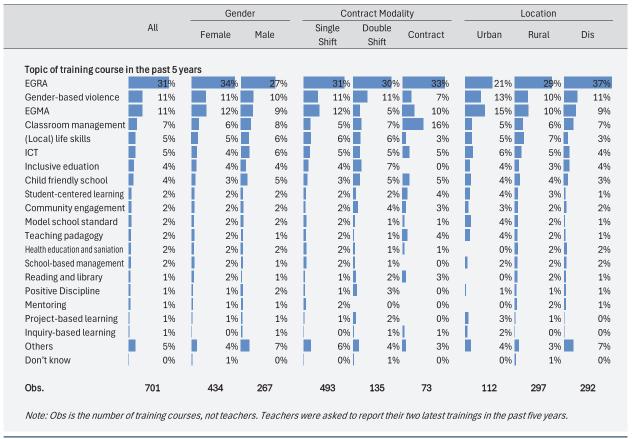


Source: 2024 World Bank Teacher and School Survey.

109. Topics such as early-grade reading, gender-based violence, and early-grade math are more often mentioned by teachers when describing INSET course attended in the past 5 years, whereas INSET courses on child-friendly schools and student-centered learning are mentioned less frequently. Among the 701 INSET courses teachers reportedly attended in the past 5 years, only 4 percent focused on child-friendly schools, and 2 percent focused on student-centered learning. The most common INSET courses attended in the past 5 years were early-grade reading (31 percent), gender-based violence (11 percent), and early-grade math (11 percent); see Figure 45.

Notably, female teachers and teachers in disadvantaged area schools more often report INSET on early-grade reading (34 percent and 37 percent respectively) compared to the overall average of 31 percent. Moreover, teachers did not mention training on TCPs, professional learning communities, or CPD in general.

Figure 45: Topics of training of recent training programs (in the past 5 years)



Source: 2024 World Bank Teacher and School Survey.

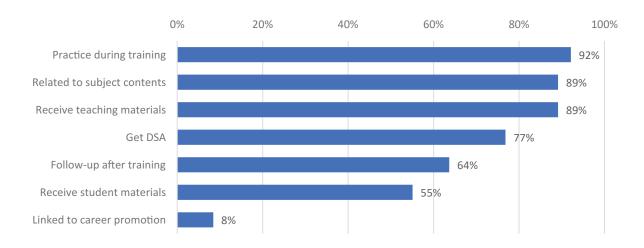
110. In addition, 7 percent of the teachers surveyed in 2024 reported participating in teacher upgrade programs. These programs support teachers holding a 12+2 qualification to upgrade to a Bachelor of Education (B.Ed.) through courses offered at the National Institute of Education (NIE), the Royal University of Phnom Penh (RUPP), Teacher Education Colleges (TECs), or Regional Teacher Training Centers (RTTCs). To be eligible, teachers must have at least 5 years of experience, be under 55 years of age, and pass an entrance exam. Teachers, surveyed in 2024 and participating in these upgrade programs, reported attending the programs offered by RTTCs (57 percent), followed by TECs (25 percent), RUPP (11 percent), and NIE (4 percent). Male teachers (10 percent), single-shift teachers (10 percent), and teachers in urban schools (14 percent) had greater access to these programs. It is unclear whether these upgrade programs are formally linked to the CPD system managed by the CPDMO.

Teacher Perception of INSET

111. Teachers generally have a positive view of the training provided, with 90 percent considering it very useful; see Figure 46. The positive sentiment is slightly stronger among contract teachers (95 percent) and teachers in disadvantaged areas (93 percent). Additionally, teachers reported that for most training (92 percent), they could practice in class what they learned during INSET courses, 89 percent of the reported trainings were perceived as having relevant subjects, and 89 percent of reported trainings provided teaching materials to the teachers.

112. However, not many teachers believe that attending INSET courses is linked to their career progression. Among teachers who recently attended INSET courses, only 8 percent believed the training was related to career promotion or salary increases. This perception is particularly low among female teachers, with only 6 percent seeing a link between CPD and career advancement, compared to 12 percent of male teachers.

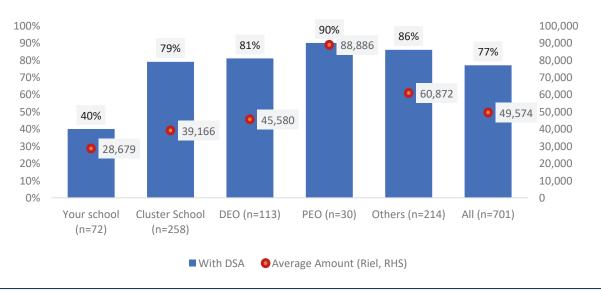
Figure 46: Teachers' perceptions on training



Source: 2024 World Bank Teacher and School Survey.

113. Daily subsistence allowance (DSA) expenditures are lower for school-based trainings, and contract teachers are less often offered DSAs for trainings. In terms of financial support, 77 percent of training workshops, reported by the teachers surveyed in 2024, offered a DSA to participants; see Figure 47. However, only 40 percent of school-based training sessions provided DSAs to participants. When DSA is provided at the school level, the average amount is significantly lower (KHR 28,679 [US\$7.2]) compared to DSA provided for training organized at the provincial level (KHR 88,886 [US\$22.2]). Contract teachers are less likely to receive a DSA, with only 56 percent reportedly receiving it.

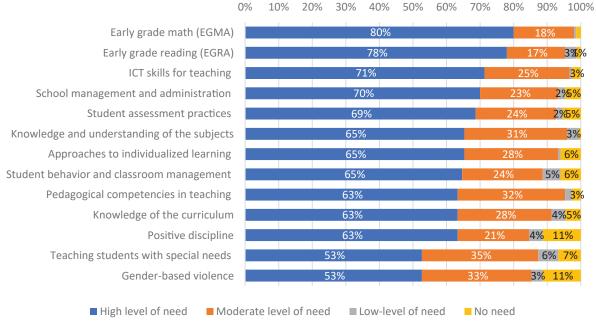
Figure 47: Training DSA by training location



Perceived Needs (principals)

114. School principals indicate that INSET courses on early-grade math and early-grade reading have the highest priority for their teachers, followed by ICT skills for teaching, school management, and student assessment. At least 80 percent of school principals indicated a high-level of need for teacher CPD in early-grade math and 78 percent for early-grade reading; see Figure 48. Despite that, these are the most prevalent training topics in recent years; see Figure 45. Regarding ICT skills, 71 percent of school directors indicated a high level of need for training, while 25 percent noted a moderate level of need. However, only 15 percent of teachers have participated in ICT training in the past, with 5 percent of recent training sessions focused on this topic. Conversely, school principals consider INSET on gender-based violence, teaching students with special needs, and positive discipline to be less important compared to other topics. Around 11 percent of school principals reported that their teachers do not require further training in positive discipline and gender-based violence.

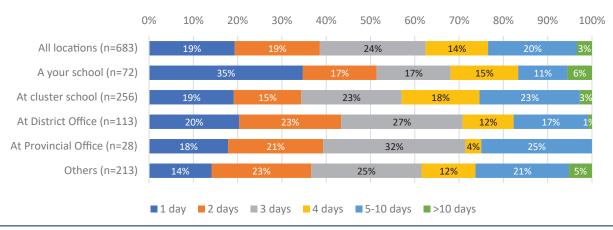
Figure 48: School principals' (n = 150) reported priorities for teacher CPD



Source: 2024 World Bank Teacher and School Survey.

115. The average duration of the INSET courses was 4 days, with lengths ranging from 1 day to over 1 month. Among these courses, 62 percent lasted 1 to 3 days, with 3-day courses being the most common (24 percent), followed by 1- and 2-day courses (both 19 percent); see Figure 49. Only 3 percent of the training courses extended beyond 10 days, while 20 percent were between 5 and 10 days. The average duration of INSET courses at cluster schools was 3.9 days, which was slightly longer than the 3.4 days for school-based training. Around 34.7 percent of school-based training courses lasted only 1 day, compared to 19 percent at cluster schools.

Figure 49: Duration of recent trainings (attended in the past 5 years) reported by teachers and location



Source: 2024 World Bank Teacher and School Survey.

116. The average duration of training greatly varied by INSET topic. The average INSET course duration on inquiry-based learning (7.2 days), teaching methodology (6.7 days), and mentoring (6.3 days) was much longer than the overall average (4 days). The average duration of INSET courses on community engagement, student-centered learning, and model school standards was less than 2 days; see Table 3. The average training duration of the most common topics was 5.2 days for earlygrade reading, 2.5 days for gender-based violence, and 4.7 days for early-grade math. Furthermore, 54 percent of the training conducted at schools or cluster schools was on early-grade reading, compared to 47 percent for gender-based violence training and 40 percent for early-grade math training at these venues.

Table 3: Training locations and average of training days by topic

		Training	Average				
Topic	Own school	Cluster school	DEO	PEO	Others	count	no. of days
Early-grade reading	7	47	16	4	26	219	5.2
Gender-based violence	16	32	24	3	26	75	2.6
Early-grade math	14	26	17	3	40	75	4.7
Classroom management	7	44	13	1	35	46	2.3
(Local) Life skills	11	37	15	4	33	38	2.3
Others	21	21	7	7	43	36	3.6
ICT skills	4	43	12	4	37	35	5.3
Inclusive education	0	15	15	0	69	27	2.9
Child-friendly school	0	44	11	0	44	26	3.7
Student-centered learning	46	31	8	0	15	15	1.9
Community engagement	0	33	33	0	33	15	1.9
Model school standards	0	40	20	0	40	14	1.5
Health and sanitation	12	35	27	4	23	13	3.2
School-based management	13	35	17	0	35	13	3.2
Teaching methodology	27	13	20	7	33	13	6.9
Reading and library	17	17	33	17	17	10	2.6
Positive discipline	25	0	50	0	25	9	3.6
Mentoring	15	15	8	8	54	9	6.3
Project-based learning	33	20	0	13	33	6	3.3
Inquiry-based learning	0	67	33	0	0	4	7.3
Don't know	11	8	19	22	39	3	1.7
Observations (number)	264	75	54	265	43	701	696

7.3 On-site School-based CPD

117. In addition to INSET courses at schools or cluster schools, the *CPD Framework* calls for onsite (school-based) CPD, including teacher technical meetings, mentoring, and the creation of professional learning communities (PLCs). Teacher technical meetings are supposed to be organized once a month on a Thursday and are aimed at sharing information and useful lessons learned. Mentoring programs are aimed at supporting mentee teachers to improve their classroom practice through regular interaction with a mentor. PLCs are supposed to be organized (at schools or cluster schools level) so that classroom and specialist teachers, school principals, and education specialists support each other to improve their teaching, leadership, and education practices.⁴¹

Thursday Technical Meetings

118. Almost all teachers surveyed in 2024 indicated attending the Thursday technical meetings at least once in the past academic year, and on average teachers reported attending seven times year. However, the reported frequency and duration of these meetings vary. While 65 percent of teachers reported attending these meetings 7 to 10 times, 4 percent reported never attending, and 8 percent reported attending only 1 to 3 times; see Figure 50. Notably, teachers are eligible for a small allowance for attending these meetings. Around 13 percent of contract teachers reported not attending any technical meetings, significantly higher than the 3 percent of single-shift and double-shift teachers who reported not attending. The average reported duration 'of the last meeting' was 3.57 hours. Meetings at schools in disadvantaged areas tended to be longer (3.79 hours) compared to those at rural (3.50 hours) and urban schools (3.33 hours). While 64 percent of teachers reported that the last meeting lasted 4 hours, 9 percent said it lasted only 2 hours or less.

Figure 50: Number of times teachers attended technical meetings

		Gen	der	Co	ntract Modal	lity	Location			
	All	Female	Male	Single Shift	Double Shift	Contract	Urban	Rural	Dis	
ow many time did you attend Thurs	day Tachnical Ma	oting loot ooo	domiouoor							
ow many time did you attend Thurs Average times attended	6.96	_	6.89	7.18	7.04	5.92	7.45	6.86	6.81	
0 time	4%	5%	_	3%		13%	_	5%		
1 time	3%	3%	_	2%	= =		1%			
2 times	2%	2%		2%	= =	_	1%	= :		
3 times	3%	4%		3%			2%	= :		
4 times	6%	5%	7%	4%		12%	_	6%	69	
5 times	8%	7%	9%	9%		6%	8%		89	
6 times	6%	5%	7%	7%			4%		89	
7 times	20%	19%	20%	22%		10%	16%		189	
8 times	15%	14%	18%	16%		11%	17%		15%	
9 times	9%	9%	7%	8%	11%	6%	9%		89	
10 times	21%	23%	18%	22%	20%	21%	28%	20%	199	
11 times	2%	2%	1%	2%	1%	2%	3%	1%	29	
12 times	1%	1%	2%	1%	1%	2%	1%	1%	19	
uration of the last meeting you atte	nded			-						
Average hours	3.57	3.54	3.61	3.55	3.45	3.78	3.33	3.50	3.79	

Source: 2024 World Bank Teacher and School Survey.

119. The predominant topic in recent Thursday technical meetings was teaching methodology; 64 percent of the teachers indicated it was the main focus of the last meeting they attended. This was followed by discussions on lesson plans (10 percent), administrative matters (7 percent), and the improvement of student learning (7 percent). These patterns were consistent across urban,

⁴¹ MoEYS 2021a.

rural, and disadvantaged areas. Similarly, school directors reported that the most frequent meeting topics were teaching methodology (54 percent), improvement of student learning (15 percent), and lesson planning (7 percent).

- **120.** Teachers generally perceived Thursday technical meetings as less useful compared to INSET courses. Only 78 percent of teachers considered the meetings very useful, while 90 percent found training courses very useful. Additionally, a small proportion of teachers (less than 1 percent) deemed the meetings somewhat useless or very useless. Suggestions for improving the meetings included reducing their frequency (14 percent), bringing in external trainers (12 percent), and increasing school principal participation (8 percent). Only 1 percent of the teachers wanted the meetings to be held more frequently, and 4 percent thought engaging the community would make the meetings more effective. Approximately one-fourth of the teachers (25 percent) were unsure about how the meetings could be improved. Notably, 40 percent of contract teachers also expressed uncertainty about improvements, reflecting their low attendance rate at these meetings, as mentioned earlier.
- **121. Teacher participation in technical meetings is low compared to their participation in INSET courses; see Figure 51.** While 48 percent of teachers reported having the opportunity to ask questions and raise issues during the last meeting, only 29 percent stated they could practice what was discussed. This is significantly lower compared to INSET courses, where 92 percent of teachers had opportunities to practice what they had learned. Additionally, 17 percent of teachers reported being passive listeners during the meetings, with contract teachers exhibiting a higher rate of passive listening at 25 percent.

Figure 51: Other information on Thursday technical meetings

		Gen	der	Cor	tract Moda	ality	Location			
	All	Female	Male	Single Shift	Double Shift	Contract	Urban	Rural	Dis	
Main topic of the last meeting										
Teaching methodology	65 %	63%	68%	68%	59%	58%	66%	62%	67 _%	
Lesson planning	10%	11%	9%	8%	14%	14%	9%	11%	10%	
Administrative matters	8%	8%	6%	7%	10%	7%	8%	7%	8%	
Improve student learning	7%	7%	7%	7%	7%	10%	7%	7%	8%	
Others	10%	11%	10%	10%	10%	12%	10%	13%	6%	
Jsefulness of the meeting										
Very useful	78%	77%	80%	76%	82%	82%	77%	78%	78%	
Somewhat useful	21%	22%	20%	24%	17%	17%	21%	21%	22%	
Somewhat useless	0%	1%	0%	0%	2%	0%	1%	0%	0%	
Very useless	0%	0%	0%	0%	0%	1%	0%	1%	0%	
low the meeting can be improved										
Make it less often	14%	12%	17%	14%	16%	13%	14%	16%	13%	
Bring outside trainers	12%	12%	12%	12%	11%	14%	13%	10%	13%	
Increased school director participation	n 8%	9%	8%	9%	12%	4%	5%	7%	12%	
Field trip	5%	5%	5%	6%	5%	3%	6%	5%	6%	
Engage community	4%	4%	3%	4%	4%	4%	3%	4%	4%	
Make it more often	1%	1%	1%	1%	2%	2%	1%	2%	1%	
Don't know	25%	30%	18%	23%	20%	40%	27%	24%	26%	
Others	30%	27%	35%	32%	32%	21%	32%	32%	26%	
ingagement in the meeting										
Mostly just listened	17%	19%	14%	16%	15%	25%	16%	20%	15%	
Could ask questioned and raised issues	48%	50%	46%	50%	51%	39%	50%	47%	49%	
Could practice what discussed	29%	26%	34%	29%	30%	28%	29%	28%	30%	
Could lead a session	2%	2%	2%	2%	2%	2%	2%	2%	2%	
99= None of the above	4%	4%	4%	4%			3%		4%	
Obs.	727	454	273	481	132	114	145	328	254	

Mentoring Programs

- 122. The 2015 TPAP introduced several new initiatives as part of on-site CPD, including mentoring programs at schools; however, most teachers surveyed in 2024 had not heard of this program and only one in six reported participating in it. The mentoring programs at schools aim to improve teacher induction and support newly qualified teachers. However, at the time of the survey, 67 percent of teachers had never heard of the mentoring program, and only 16 percent had been part of it (7 percent as mentors and 9 percent as mentees); see Figure 52. The level of engagement is particularly low among contract teachers (8 percent) and somewhat lower among teachers in urban schools (12 percent).
- 123. The participation rates in the mentoring program by age group indicate that it is not specifically tailored for novice teachers. The proportion of young teachers participating as mentees is 10 percent, compared to 11 percent for older teachers. Additionally, 5 percent of teachers in both age groups serve as mentors. However, mid-career teachers (ages 30 to 39) are more likely to take on mentoring roles (12 percent).

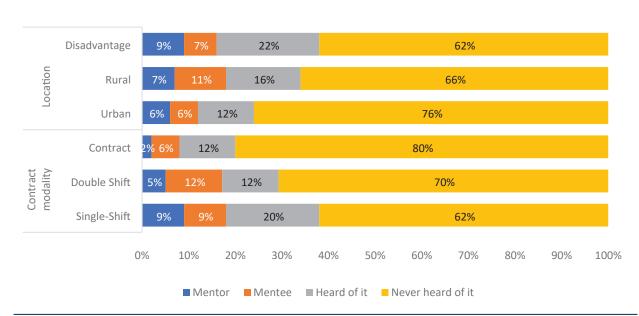


Figure 52: Teacher awareness and participation in mentoring program

Source: 2024 World Bank Teacher and School Survey.

Professional Learning Communities

124. The MoEYS 2019 CPD Framework also calls for the creation of PLCs in schools; however, these appear to be almost nonexistent, as most teachers and the majority of school principals have never heard of such communities. Based on the CPD Handbook, PLCs are supposed to serve as a platform for teachers, school principals, and education specialists to share knowledge and experience to enhance teaching and leadership practices. Although PLCs were not explicitly mentioned as part of the on-site school-based and cluster-based CPD in the TPAP 2015, they were introduced as a key modality alongside mentoring for school-based and cluster-based CPD in the MoEYS 2019 CPD Framework for teachers and school principals. However, 88 percent of the teachers surveyed in 2024 reported never having heard of PLCs, and only 3 percent indicated that their schools had a PLC. The number of teachers who have actually engaged in PLCs is likely even lower. Out of the 150 school principals surveyed in 2024, only two (1.3 percent) indicated their school had a PLC, and 69 percent of school principals had never heard of PLCs.

7.4 Teacher Self-directed CPD

- **125.** Teacher self-directed CPD includes various individual learning activities that are not necessarily pursued at accredited CPD providers. Examples include enrolling in Massive Open Online Courses (MOOCs), attending or presenting at conferences, participating in research groups, reading professional literature such as journals and books, conducting independent research, and publishing articles. However, the most common form of self-directed CPD among teachers is pursuing higher degrees, particularly university bachelor's degrees.
- **126.** More than **30** percent of teachers obtained higher degrees after becoming teachers, and **9** percent were enrolled in degree programs at the time of the **2024** survey. Specifically, 27 percent of the teachers surveyed in 2024 had obtained bachelor's degrees, and 8 percent were pursuing them at the time of the survey. Additionally, 2 percent had obtained master's degrees, and 1 percent were enrolled in master's programs. Despite the absence of universities in rural and disadvantaged areas, nearly 10 percent of the teachers in these areas were enrolled in degree programs, compared to only 6 percent of urban teachers.
- 127. Nearly 30 percent of contract teachers were enrolled in degree programs; see Figure 53. This could be partly attributed to the relatively high number of young contract teachers; 24 percent of teachers ages 19–29 were enrolled in a degree program. It is unclear, however, if teachers intended to upgrade their qualifications as part of their career progression plans, given that many teachers are not familiar with the career pathways and CPD. It seems that the fairly high number of teachers who have obtained or are in the process of obtaining higher education qualifications is not directly linked to familiarity with the TCPs or other incentives associated with them.

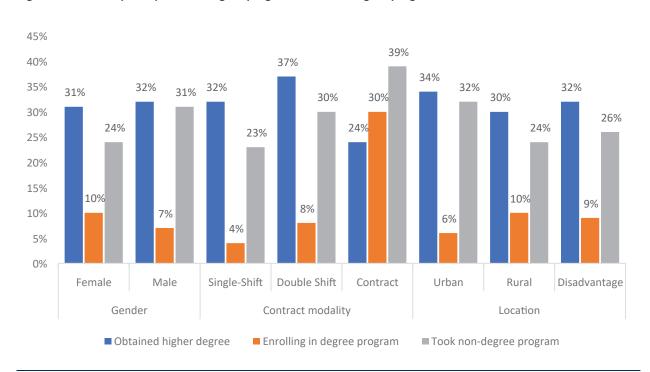


Figure 53: Teacher participation in degree programs and non-degree programs

8 Teacher Math Tests

- **128.** This section analyzes and briefly discusses the results of a math test completed by primary school teachers as part of the **2024** survey. As part of the survey, 725 teachers were asked to complete a multiple-choice math test, the same as was completed by teachers in 2012. This test consists of 30 questions (and 49 test items that require a response), divided into four components:
 - (a) 6 mathematics 'content knowledge' questions at grade 6 difficulty level, retrieved from NLAs conducted before 2012
 - (b) 12 mathematics 'content knowledge' questions at grade 9 difficulty level, retrieved from NLAs conducted before 2012
 - (c) 6 mathematics 'content knowledge' questions at grade 8 difficulty level, retrieved from the public items of the 2008 TIMSS
 - (d) 6 'pedagogical content knowledge' (PCK) questions, focusing on the application of mathematical knowledge through a combination of content and pedagogical elements.
- **129.** Teachers' test results should be interpreted with great caution, however, as there are many methodological challenges to accurately testing teacher competencies. Teachers are notoriously difficult to test, as many teachers are *very* reluctant to take tests, believing tests ought to be taken by students instead. Teachers might also fear the potential ramifications of poor test scores and might experience anxiety or instead opt to boycott the testing process (or not fully commit to completed test items at their fullest capabilities). Younger teachers might be more eager to demonstrate their competencies while still aspiring for growth in their professional careers. Whereas older teachers approaching retirement might be more reluctant to complete tests as they yield little potential benefits, but it might expose them to risks (for being deemed incompetent/ underqualified). Moreover, not all teachers are equally familiar with test formats and especially older teachers might be less familiar with multiple-choice testing as well as test items that include pedagogical elements. Although studies have demonstrated that teacher test results can be related to teacher effectiveness, not all tests accurately reflect this.⁴²
- 130. The 2012 and 2024 teacher tests results differ considerably in terms of response rates (percentage of items answered/unanswered), significantly lowering the confidence of any comparison across the two test cohorts. In 2012, on average, teachers left slightly more than one-quarter of items (12.6 out of 49) blank, whereas in 2024 the average number of unanswered items was less than 10 percent (4.7 out of 49). Older teachers also left more items unanswered compered to younger teachers. This discrepancy in response rates significantly lowers the confidence of comparisons across cohorts, as it is unclear *why* teachers in 2012 (and older teachers) left more items blank and *how this affected* their level of effort per item. Teachers might have prioritized avoiding making mistakes. However, if teachers would have guessed the remaining items, their scores would have been higher.⁴³ In 2012, teachers might have intentionally skipped more difficult and time-consuming items, or they tried to finish all items but lacked sufficient time. Conversely, in 2024, teachers might have tried to answer all items including the more time-consuming items and therefore responded with on average less time (and effort) per item. The uncertainty regarding level of effort and the reason for skipping items reduced the overall confidence in the comparison.

⁴² See, for example, Goldhaber (2007).

⁴³ Teachers were tested individually across 150 school settings and did not receive uniform and clear instructions on how to treat items for which they did not know the correct response. However, in testing methodology it is considered best practice to provide a uniform instruction to examinees on multiple-choice tests to either respond to all items (even if the examinees do not know the correct response) or to only fill the items for which they feel they know the correct response.

- 131. The analysis in this subsection will evaluate the percentage of items with correct responses out of the total number of items. Unanswered items are treated as incorrect, and the analysis assumes that the primary reason for leaving these items blank is that teachers found them too difficult. However, alternative methods could be applied where blank items are ignored (that is, calculate the correct response rate out of the total number of filled items only), or items could be weighted, according to item response theory (IRT), where more difficult items receive more weight in the calculation of the test score.
- **132.** The 2024 survey indicated that younger teachers performed significantly better than older teachers. Younger teachers (ages 29 and under) scored 61 percent correct (of all items), compared to 54 percent for 30–39 years, 51 percent for 40–49 years, and only 42 percent correct for older teachers (ages 50 and over); see Figure 54. However, a similar trend was observed in 2012, where younger teachers performed considerably better than their older colleagues. Although this might intuitively suggest that younger teachers are 'better trained', the significant decline in test scores across age cohorts seems largely due to *declining competencies* of teachers when they get older (and not practicing grade 8 and 9 level math skills), as discussed in the following paragraphs.

61% 58% 54% 52% 51% 48% 44% 42% 30-39 40-49 30-39 29 and under 50 and over 29 and under 40-49 50 and over 2012 2024

Figure 54: Teacher math test 'percent correct' scores across age cohorts (2012 and 2024)

Source: 2012 and 2024 World Bank Teacher and School Surveys.

133. Younger teachers outperformed older teachers on all test components, especially on items at grade 8 (TIMSS) and grade 9 difficulty level; see Figure 55. Test scores decline across all components the older the teacher age cohort, but the decline is more dramatic for the TIMSS and grade 9 items after the age of 29. For grade 6 and PCK items, the decline is more dramatic after the age of 49. This pattern suggests that primary school teachers to a large extent retain their grade 6 math and PCK skills because they practice these skills almost daily while teaching, whereas their grade 8 and 9 math skills decline rapidly after leaving secondary school (and becoming a teacher).

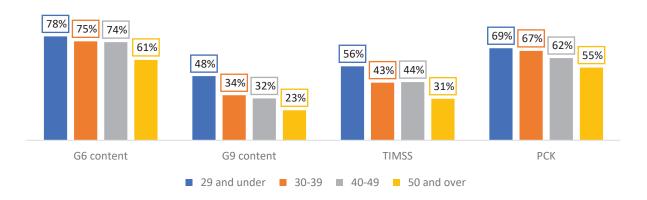
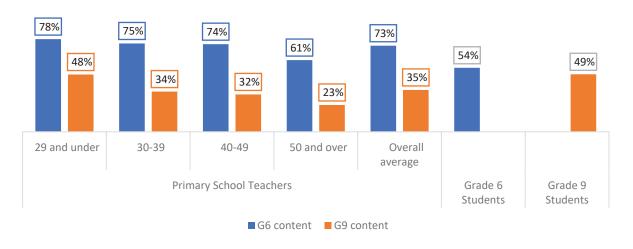


Figure 55: Teacher math test 'percent correct' scores across test components and by age cohorts (2024)

134. Younger teachers perform significantly better than grade 6 students (on grade 6 difficulty level items) but similar to grade 9 students (on grade 9 difficulty level items); see Figure 56. All primary school teacher age cohorts perform better than grade 6 students on grade 6 items, but teachers ages 30 and over on average perform poorer on grade 9 items compared to grade 9 students. This pattern appears to reaffirm that teachers retain grade 6 math skills, as they practice them every day, but lose the math skills that they do not practice in class.

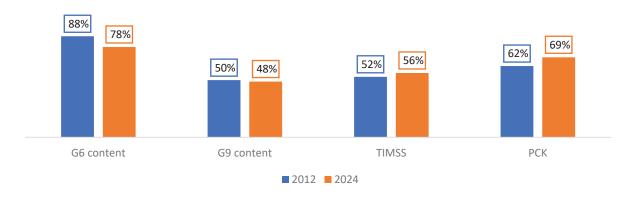
Figure 56: Teacher math test 'percent correct' scores across grade 6 and grade 9 components and by age cohorts, compared to student NLA scores (2024)



- **135.** However, younger teachers (ages 29 and under) in 2024 did not demonstrate a significant improvement in math skills compared to 2012. On average, teachers in 2024 (all age cohorts) score 53 percent of items correctly, whereas in 2012, this was 52 percent (not a statistically significant difference). Younger teachers (ages 29 and under) in 2024 scored 61 percent correctly, compared to 58 percent in 2012. This is only a marginal improvement and is based on considering blank items incorrect. However, younger teachers in 2012 left more items blank, and if both groups would have guessed the remaining items, the difference would not be statistically insignificant.⁴⁴
- **136.** Younger teachers (ages 29 and under) in 2024 scored significantly higher on PCK items but lower on grade 6 items, compared to 2012. Younger teachers in 2024 scored on average only 78 percent correct on grade 6 difficulty level items, whereas in 2012, they scored 88 percent correct. Conversely, younger teachers in 2024 scored on average 69 percent correct on PCK items, compared to 62 percent in 2012; see Figure 57. Differences between the 2012 and 2024 surveys on grade 9 and TIMSS items are statistically insignificant.

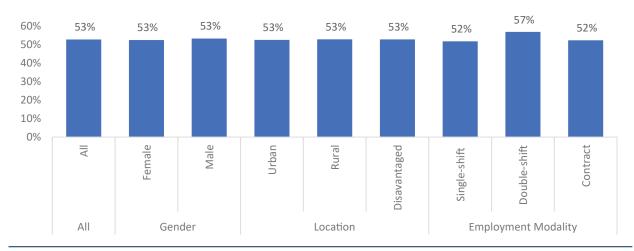
⁴⁴ If all blank items are ignored for teachers in 2012 and 2024 (all age cohorts), math test scores are lower in 2024 than in 2012. However, as discussed in this subsection, it is not clear why items were left blank and how examinees differed in their level of effort, and in this analysis, examinees are assumed to primarily leave items blank if they found them difficult.

Figure 57: Teacher math test 'percent correct' scores for teachers ages 29 and under across test components (2012 and 2024)



137. Remarkably, teachers' test scores in 2024 did not significantly vary across school locations (urban, rural, or disadvantaged areas) or gender. However, double-shift teachers performed significantly better than their regular civil servant and contract teacher peers. Differences in average math scores across genders are minor and statistically insignificant; see Figure 58. Teachers in schools in rural and disadvantaged areas performed similar to teachers in urban schools, which contradicts a widely held belief that rural and disadvantaged area teachers are less competent than their urban peers. It suggests that the MoEYS has succeeded in promoting teaching quality in rural and disadvantaged areas. It also raises questions about the continued necessity to incentivize working at these schools. However, the test was applied to teachers working at rural and disadvantaged area schools (and includes urban teachers relocated to these areas).

Figure 58: Teachers' math results by gender, school location, and contract modality



Source: World Bank's 2024 Teachers' Math Test.

9 Classroom Observations

138. This section analyzes the findings from classroom observations and classroom surveys conducted with teachers after the observation as part of the 2024 teacher and school surveys, compares these findings to the 2012 survey data, and discusses its implications. In both the 2012 and 2024 surveys, two teachers, in each of the sampled schools, were selected for observation of a full lesson (one for Khmer and one for math). In total, 284 lessons were observed in the 2012 survey and 300 lessons in the 2024 survey, and usually these were lessons for grade 3 or 4 students. Student attendance and textbook availability were recorded for *all* classes in the sampled schools (2,173 classes in the 2012 survey and 1,933 classes in the 2024 survey).

9.1 Student Attendance and Textbook Availability Rates

139. The student attendance rates observed in classes rose from 82 percent in 2012 to 87 percent in 2024, meaning in 2024 seven out of eight enrolled students typically attend class; see Figure 59. In both the 2012 and 2024 surveys, girls' attendance rates (83 and 89 percent, respectively) are somewhat higher than boys' attendance rates (82 and 87 percent, respectively). Urban student attendance is somewhat higher compared to rural and disadvantaged areas. In 2024, the observed attendance rate in urban school classes was 92 percent, compared to 87 percent in rural schools and only 85 percent in disadvantaged area schools.

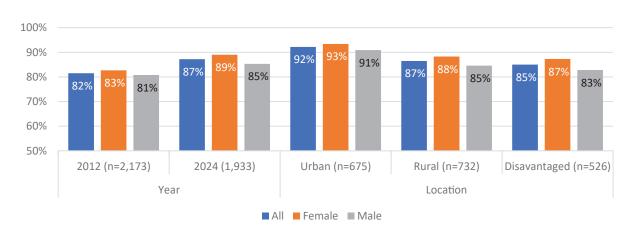


Figure 59: Student attendance

Source: 2012 and 2024 World Bank Teacher and School Surveys (Student Attendance Check List).

- 140. The average *number* of attending students per class (15 minutes after the start of the lesson) is considerably higher for urban primary schools than for rural and disadvantaged area schools. In 2024, there were on average 42.4 attending students per class in urban primary schools, compared to 31.2 in rural schools and 28.9 in disadvantaged area schools. The nationwide average number of attending students per class decreased slightly from 33.3 in 2012 to 32.5 in 2024.
- **141.** Textbook availability for students has more than doubled since **2012**, but in **2024** there are still less textbooks than students, especially for science lessons. The textbook-to-student ratios rose from 0.35 in 2012 to 0.79 in 2024 for Khmer books and from 0.36 to 0.77 for math; see Figure 60. The availability of science textbooks rose from 0.42 to 0.74 textbooks per (grades 4–6) student (note: science subjects are introduced only from grade 4). Overall, urban areas reported

⁴⁵ In 2024, grades 3 and 4 were equally prioritized for classroom selection, although one grade 2 class and eleven grade 5 classes were also observed when grade 3 or 4 classes were unavailable. In 2012, 77 percent of the observed class were grade 4, and the remaining were grade 3.

slightly higher textbook-to-student ratios, while disadvantaged area schools had the lowest ratios. Additionally, a growing number of students purchased textbooks out of pocket, with an increase from 6 percent in 2012 to 14 percent in 2024. This trend was particularly pronounced in urban areas, where 34 percent of students bought textbooks. The average number of classroom displays did not change significantly since 2012 (60 pieces in 2012 and 56 pieces in 2024); however, in 2024, fewer displays were made by the students themselves (11 percent compared to 23 percent in 2024).

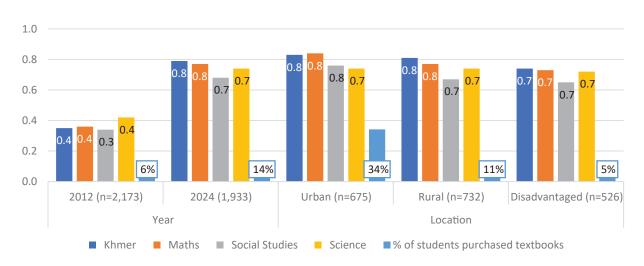


Figure 60: Textbook-to-student ratio for Khmer, math, social studies, and science 2012, 2024, and by location (2024)

Source: 2012 and 2024 World Bank Teacher and School Surveys.

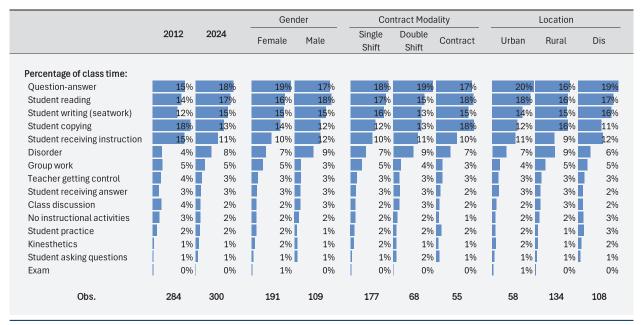
9.2 Observation Time Categorization

Method of Instruction and Classroom Practices

- 142. Classroom observation data from the 2012 and 2024 surveys suggests that remarkably little has changed in terms of the method of instruction and classroom practices. During the observation, classroom activities are classified into 1 of the 16 activities listed in Figure 61, every 30 seconds. The top five classroom activities—'question-answer' (recitation); 'student reading'; 'student writing' (seatwork); 'student copying'; and 'student receiving instruction'—accounted for almost three-quarters (73 percent) of total lesson time in both 2012 and 2024. However, in 2024, the time observed for 'student copying' (13 percent) and 'student receiving instruction' (11 percent) had declined by 5 percentage points compared to the 2012 observations. Conversely, the time spent on 'question-answer' (18 percent), 'student reading' (17 percent), and 'student writing' (15 percent) increased by 3 percentage points each; see Figure 61.
- 143. Classroom practices in 2024 were also remarkably consistent across school locations (urban, rural, and disadvantaged areas) and teacher gender and contract modalities. Differences across these categories were typically statistically insignificant. However, contract teachers tended to devote more time to 'student copying' (18 percent) and less to 'group work' (3 percent) compared to other teachers. And primary teachers in rural areas devoted on average less time to 'question-answer' but more to 'student copying' than their colleagues in urban and disadvantaged areas.

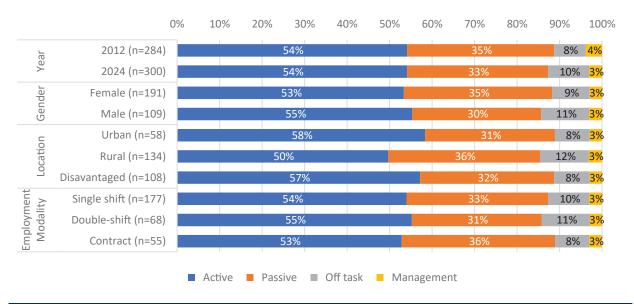
⁴⁶ Importantly, the most often observed behaviors in the classroom observation exercise are not chronologically at the top of the rating instrument, suggesting that consistencies observed across years, locations, genders, and contract modalities are not the result of response option or item sequencing of the observation instrument.

Figure 61: Results from classroom observations in 2012 and 2024



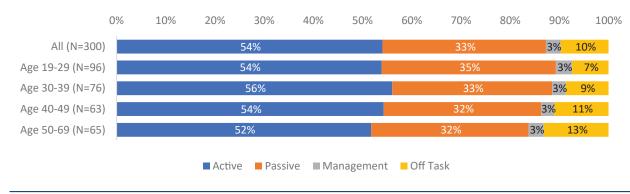
- 144. Rarely did the 2024 classroom assessment observe practices such as 'student asking questions' (only 1 percent of the time) and 'student practice' (2 percent of the time), and this observed pattern was similar in 2012. In the observed lesson, little time was devoted to 'kinesthetics' and 'group work' (2 percent and 5 percent, respectively). Moreover, these observed trends were fairly similar across school locations, teacher gender, and contract modalities.
- 145. Using Stallings observation categories, the data from the classroom observations also shows little variation between 2012 and 2024, as well as across school location, teacher gender, and contract modality. Stallings categories for time use are grouped into 'active instruction' - includes 'question-answer', 'student asking questions', 'student receiving answer', 'class discussion', 'student reading', 'student practice', 'instruction', and 'kinesthetic' activities; 'passive instruction' - includes 'student copying', 'student writing', 'group work', and 'exam'; 'management' - includes 'teacher getting control'; and 'off-task' (no instructional activities and disorder). On average, 54 percent of classroom time was categorized as 'active instruction' and 33 percent as 'passive instruction' and the remaining 13 percent as either 'off-task' or dedicated to classroom 'management' in 2024. Classroom activities in urban and disadvantaged area schools were nearly identical based on Stallings categories; see Figure 62.

Figure 62: Classroom activities grouped by Stallings category



146. Analysis by teacher age groups using the Stallings categories also indicates no significant differences between younger and older cohorts; see Figure 63. Teachers across all age groups dedicated approximately half of their time to 'active instruction' and about one-third to 'passive activities'. However, younger teachers tended to allocate less time to 'off-task' activities. These results were consistent even after excluding contract teachers from the sample, suggesting that recent pedagogical training has had little impact on how classroom activities are conducted.

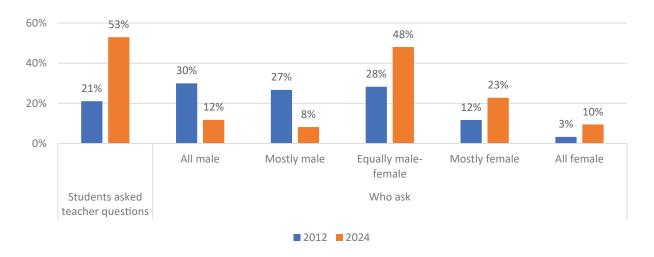
Figure 63: Classroom observations, Stalling categories by teachers' age group



Source: 2012 and 2024 World Bank Teacher and School Surveys.

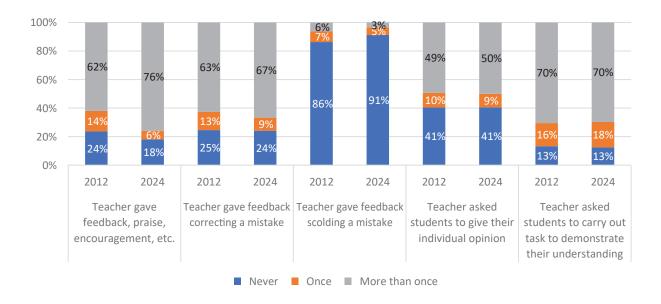
147. Although based on the activity classification, the times that students ask questions is very low in both years; classroom observation check list suggests that students tend to have more chances to ask questions in the classroom. Students became significantly more active in asking questions, with the proportion of observed classes where students asked questions rising from 21 percent in 2012 to 53 percent in 2024. However, it is important to note that in nearly half of the observed classes in 2024, students did not ask any question during the class; see Figure 64. In addition, in 2012, male students were more active than female students in asking questions; this trend reversed by 2024, with girls becoming more engaged in posing questions. On average, students asked questions 2.2 times per class in 2024, nearly three times higher than in 2012, when it was 0.7 times.

Figure 64: Class in which students ask questions



- 148. The frequency of teachers asking questions to students increased significantly in 2024, with teachers asking an average of 23 questions per class, compared to 11 in 2012. Additionally, teachers posed more questions that encouraged imaginative or creative thinking (35 percent) and fewer questions that required collective responses (28 percent) compared to 2012, when these figures were 22 percent and 42 percent, respectively. This shift was observed consistently across urban, rural, and disadvantaged area schools.
- 149. Between 2012 and 2024, there were subtle changes in how teachers provided feedback to students. In 2024, teachers were more inclined to offer praise or encouragement and less likely to give negative feedback when students made mistakes. However, the practice of soliciting students' opinions remained largely unchanged, with over 40 percent of teachers in both years failing to ask for students' opinions; see Figure 65. Similarly, there was no significant change in the percentage of teachers who checked students' understanding by asking them to perform tasks.

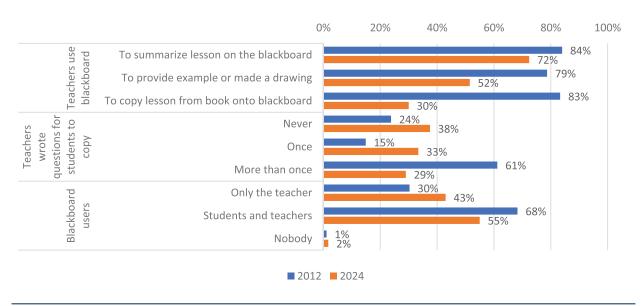
Figure 65: Teacher feedback during the lesson



Source: 2012 and 2024 World Bank Teacher and School Surveys.

150. The practice of teachers copying lessons from textbooks to the blackboard and writing questions for students to copy has declined significantly. In 2012, in 83 percent of the classes observed, the teachers used the blackboard to copy lessons, but by 2024, this figure had dropped to 30 percent; see Figure 66. However, summarizing lessons on the blackboard continued, with 72 percent of teachers continuing this practice in 2024. Additionally, the proportion of teachers who wrote questions on the blackboard for students to copy more than once during the observation period decreased from 61 percent in 2012 to 29 percent in 2024. However, fewer teachers in 2024 allowed students to use the blackboard, with only 55 percent of classes involving both teachers and students in blackboard activities, down from 68 percent in 2012.

Figure 66: Teachers' use of blackboard



Source: 2012 and 2024 World Bank Teacher and School Surveys.

10 Teaching Practices

151. This section describes and analyzes data on the use of ICT in teaching, including access to facilities and perceived ICT skills for teaching. Thereafter it discusses inclusive education, training on inclusive education and teachers' perceived skills. This section ends with a brief discussion on teacher standards.

10.1 Teaching and ICT

152. This subsection briefly presents survey findings on the role of ICT in primary school teaching in Cambodia. It summarizes findings on the availability of ICT facilities as well as teacher self-reported data on ICT use and skills.

ICT Facilities

153. Almost all (95 percent) of teachers in the 2024 survey reported having ('always' or 'almost always') access to electricity at school, and 88 percent reported having ('always' or almost 'always') access to the internet (presumably through personal smartphones and wireless networks, as only 20 percent of teachers reported having access to school-provided internet); see Figure 67. There are disparities in access to school-provided internet; 35 percent of urban school teachers reported having access to school-provided internet, compared to 20 percent of rural teachers and 10 percent of teachers in disadvantaged areas.

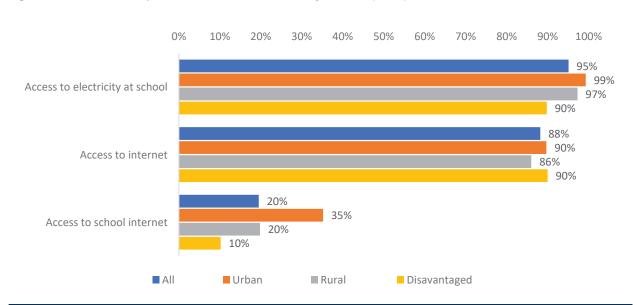


Figure 67: Teacher slef-reported access to ICT facilities by location (2024)

Source: 2024 World Bank Teacher and School Survey.

154. Primary school principals indicate ICT equipment is usually available but often exclusively used for school management and administration and typically not available for teaching. Nearly all schools (99 percent) have computers and photocopiers (100 percent); however, these are primarily used for administrative tasks and access for teachers (and students) is often restricted; see Figure 68. There is a significant variation in the availability of liquid crystal display (LCD) projectors across different geographic locations: 38 percent of school in urban areas have LCD projectors, compared to 24 percent in rural areas, and 19 percent in disadvantaged areas. Despite this apparent availability, very few teachers reported using computers or LCD projectors in their teaching.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 100% Electricity 100% Television DVD LCD projector 24% Photocopier Computer Urban Rural Disadvantaged

Figure 68: School facilities reported by school directors

Use of ICT for Teaching

- 155. In the 2024 survey, 93 percent of teachers reported *never* using a computer (for teaching purposes), and 95 percent indicated they *never* used Microsoft Office in class; see Figure 69. Male teachers and teachers in urban schools report marginally higher rates of using computers and Microsoft Office in teaching. For almost half (49 percent) of teachers, the main reason for not using computers for teaching is the lack of access to computers (although nearly all schools reported having at least one computer), whereas 30 percent indicated they do not have the skills, and 19 percent indicated they do not know why they should use a computer in class. However, none of the teachers claimed it is unnecessary to use computers in teaching, suggesting that teachers are positive about using technology for teaching provided they have sufficient skills and facilities.
- **156.** Almost one-quarter (24 percent) of teachers indicated using the internet in teaching, slightly higher than the reported use of computers and Microsoft Office. Teachers also tend to have more confidence in using the internet; 13 percent reported having the required skills to use the internet, while 7 percent and 4.4 percent reported having the required skills to use computers and Microsoft Office, respectively.
- **157.** The most common digital device used for teaching is a mobile (smart) phone; **35** percent of teachers indicated using it in class. Only 3 percent of teachers report having used other devices (such as a TV, projector, or smartboard) and 7 percent reported that they had used the MoEYS' e-learning platform. There were no noticeable differences in the use of digital devices and application in teaching between schools in urban, rural, and disadvantaged areas.

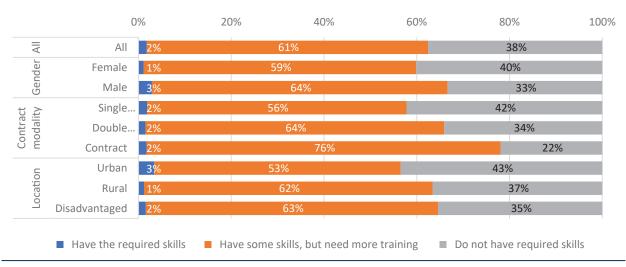
Figure 69: Teacher's use of ICT for teaching

		Ge	nder	C	ontract Mod	iauty		Location	1
	All	Female	Male	Single Shift	Double Shift	Contract	Urban	Rural	Di
Never use computer in teaching	92.7%	93.8%	90.8%	93.4%	90.2%	93.0%	89.7%	92.1%	95.3%
Main reason of not using	_				_				
Do not have access	49.4%	46.9%	53.6%	51.5%	45.4%	45.3%	42.3%	45.0%	58.7%
Don't know what purpose	19 .3%	18.5%	20.6%	1 5.1%	19.3%	36.8%	1 6.9%	21 .5%	17.8%
Don't have skills to use	30. 3%	33.1%	25.4%	32.5%	33.6%	17.0%	39.2%	32.5%	22 .7%
Think it is not necessary	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Others	1.0%	1.4%	0.4%	0.9%	1.7%	0.9%	1.5%	1.0%	0.8%
Have the required skills to use computer	_	_				_			
Yes	6.9%	4.8%	10.3%	6.9%	9.1%	4.4%	11.0%	5.8%	5.9%
Yes, but need more training	46.4%	45.4%	48.0%	38.9%	53.0%	70.2%	39.3%	48.5%	47.6%
No	46.8%	49.8%	41.8%	54.3%	37.9%	25.4%	49.7%	45.7%	46.5%
Never use MS Office in teaching Main reason of not using	95.3%	96.9%	92.7%	96.3%	92.4%	94.7%	93.1%	94.8%	97.3%
Do not have access	29.7%	28.6%	31.6%	28.1%	35.3%	30.6%	32.6%	25.7%	33.2%
Don't know what purpose	14.6%	14.8%	14.2%	12.1%	14.8%	25.0%	10.4%	15.8%	15.49
Don't have skills to use	38.1%	39.3%	36.0%	43.8%	33.6%	18.5%	40.0%	39.9%	34.89
Think it is not necessary	16.5%	16.4%	16.6%	15.1%	13.9%	25.0%	14.8%	17.7%	15.89
Others	1.2%	0.9%	1.6%	0.9%	2.5%	0.9%	2.2%	1.0%	0.8%
Have the required skills to use MS office	11.270	0.570	1.070	10.070	2.070	10.070	2.270	11.070	10.070
Yes	4.4%	1.8%	8.8%	4.6%	4.6%	3.5%	8.3%	3.0%	3.9%
Yes, but need more training	46.8%	47.8%	45.1%	38.5%	53.0%	74.6%	37.9%	51.5%	45.7%
No	48.8%	50.4%	46.2%	57.0%	42.4%	21.9%	53.8%	45.4%	50.4%
Never use internet in teaching	76.3%	77.8%	74.0%	78.4%	68.2%	77.2%	71.0%	75.9%	79.9%
Main reason of not using									
Do not have access	22.0%	21.5%	22.8%	23.3%	20.0%	18.2%	20.4%	18.1%	27.6%
Don't know what purpose	23.8%	24.6%	22.3%	23.6%	20.0%	28.4%	21.4%	21.7%	27.6%
Don't have skills to use	21.8%	21.8%	21.8%	23.6%	26.7%	9.1%	30.1%	26.1%	12.39
Think it is not necessary	31.2%	31.2%	31.2%	27.9%	32.2%	44.3%	27.2%	32.5%	31.5%
Others	1.3%	0.8%	2.0%	1.6%	1.1%	0.0%	1.0%	1.6%	1.0%
Have the required skills to use internet									
Have the required skills	13.3%	12.3%	15.0%	13.5%	13.6%	12.3%	14.5%	14.0%	11.8%
Have some skills, but need more training	55.9%	56.2%	55.3%	52.0%	53.8%	74.6%	49.7%	54.3%	61.49
Do not have required skills	30.8%	31.5%	29.7%	34.5%	32.6%	13.2%	35.9%	31.7%	26.8%
Use the following devices and application in	teaching								
Mobile phone	34.7%	34.4%	35.2%	31.6%	46.2%	34.2%	34.5%	33.8%	35.8%
Other devices (TV, projector, smartboard)	3.3%	3.1%	3.6%	3.7%	2.3%	2.6%	7.6%	3.4%	0.8%
Social Media (Facebook, telegram)	1 1.6%	11.5%	1 1.7%	11.4%	11.4%	12.3%	20.0%	11.9%	6.3%
Zoom, Meets, Teams	0.8%	0.9%	0.7%	0.6%	1.5%	0.9%	0.7%	0.6%	1.2%
Digital learning games	12.0%	13.0%	10.3%	10.8%	12.9%	15.8%	13.1%	11.9%	11.4%
MoEYS e-learning platform	6.6%	7.0%	5.9%	5.4%	7.6%	10.5%	10.3%	5.5%	5.9%
Obs.	727	454	273	481	132	114	145	328	25

Teacher ICT Skills

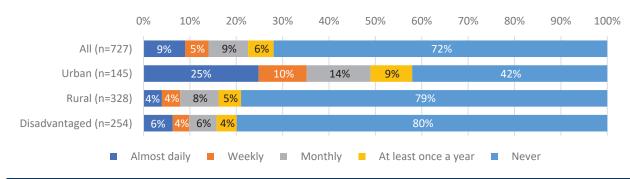
158. Only 7 percent of the teachers surveyed in 2024 indicated they were confident they had 'the required skills' to use the computer for teaching, while another 46 percent said they had 'some skills but needed further training'; see Figure 69. There are significant gaps between teacher genders and locations, where male and urban teachers more often report they have the required computer and Microsoft Office skills. When rating their overall ICT skills, only 2 percent of teachers felt 'confident in their abilities'. A significant proportion, 60 percent, reported having 'some' ICT skills but needing further training', while 38 percent indicated they had 'no ICT skills'. Male teachers generally reported slightly higher confidence in ICT skills and lower need for additional training than female teachers, although the difference was minimal. Notably, only 5 percent of recent INSET reported by teachers were related to ICT; see Figure 70.

Figure 70: Teacher's self-reported overall ICT skills



- **159.** Moreover, 74 percent of teachers surveyed in 2024 reported never using email, and only 6 percent reported using it 'at least once a week'. The 2024 survey asked teachers about their use of general technology in daily life. Teachers seem more familiar with quick response (QR) payments than with email, over half (55 percent) of the teachers reported using QR payments 'at least once a month', and only 28 percent had never used them. Interestingly, the QR payment use seems to be more prevalent among teachers working at schools in disadvantaged areas (65 percent of disadvantaged school teachers reported using it 'at least once a month', and only 16 percent reported having 'never used it').
- **160. Telegram is widely used for communication in Cambodia, including among teachers;** see Figure 71. However, only 23 percent of teachers reported using it 'at least once a month' to communicate with parents. This use was more common among urban teachers, with nearly half (49 percent) reporting using it 'at least once a month', more than thrice the rate in rural and disadvantaged areas (at 16 percent).

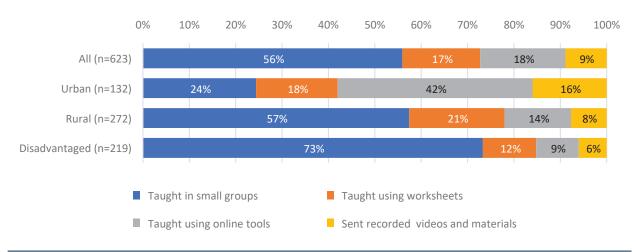
Figure 71: Teacher use of Telegram for comunication with parents



Source: 2024 World Bank Teacher and School Survey.

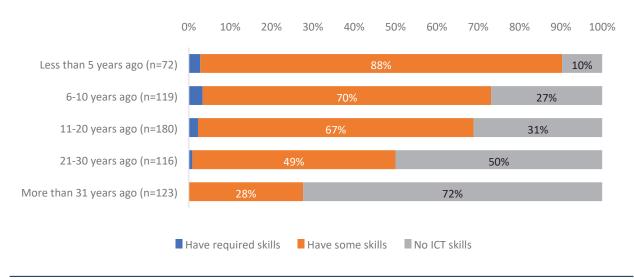
161. Online platforms, to continue teaching during the school closures caused by the COVID-pandemic, were more often used by teachers in urban schools; see Figure 72. During the school closures in 2020, the majority of teachers (56 percent) taught students in small groups. However, teaching modalities varied significantly between schools. While 57 percent of rural schools and 73 percent of disadvantaged area schools taught in small groups, only 24 percent of urban teachers used this approach. Instead, 42 percent of urban teachers were able to use online platforms for teaching, while the remaining 16 percent sent recorded videos and materials for students to learn.

Figure 72: Teaching approach during school closure due to COVID-19



162. Younger teachers (those who graduated more recently from teacher training) are more confident they 'have some skills' for using ICT in teaching. A total of 610 civil servant teachers participated in the 2024 survey (contract teachers were excluded as they typically do not receive pedagogic training). These teachers were grouped into different graduation cohorts. Nearly 72 percent of teachers from older cohorts, who completed their training 31 years ago or more, admitted to having no ICT skills; see Figure 73. In contrast, among the most recent cohort, who graduated less than 5 years ago, this rate drops to only 9 percent. Although few teachers claimed to have the required skills, 88 percent of the recent cohort reported having at least some ICT skills, suggesting that newer teachers are better equipped with ICT competencies.

Figure 73: Teacher self-reported ICT skills by year of teaching training graduation



Source: 2024 World Bank Teacher and School Survey.

163. Younger cohorts are more likely to use computers in their teaching and less likely to report a lack of skills as the reason for not using computers; see Figure 74. They are also more likely to cite a lack of access to computers as the main barrier to integrating ICT into their teaching (rather than skills). Despite this, even among the recent cohort (graduated less than 5 years ago), less than 3 percent were confident that they have the required skills to integrate ICT into teaching.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Less than 5 years ago (n=72) 6% 20% 6-10 years ago (n=119) 11-20 years ago (n=180) 25% 21-30 years ago (n=116) 40% 38% More than 31 years ago (n=123) Don't have skills Other reasons Use computer No access Don't know purpose

Figure 74: Reasons not to use computers in teaching by teacher training graduation cohorts

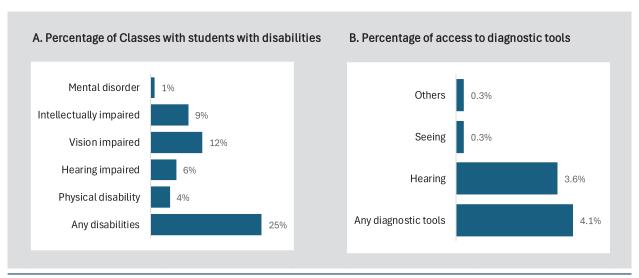
10.2 Inclusive Education

- **164. In 2018, the MoEYS adopted the Policy on Inclusive Education** with the primary goals of ensuring early identification and timely intervention for students with special needs, providing inclusive and equitable education for all, enhancing the capacity of teachers and school management, and raising awareness and promoting active participation in inclusive education. The implementation of this policy is overseen by the Department of Special Education (now Department of Non-formal and Inclusive Education).
- **165.** This section discusses the challenges related to implementing inclusive education in primary schools. It focuses on teachers' training and preparedness, access to resources such as diagnostic tools and teaching materials, support for students with disabilities, and teacher perceptions of inclusive education.

Students with Disabilities

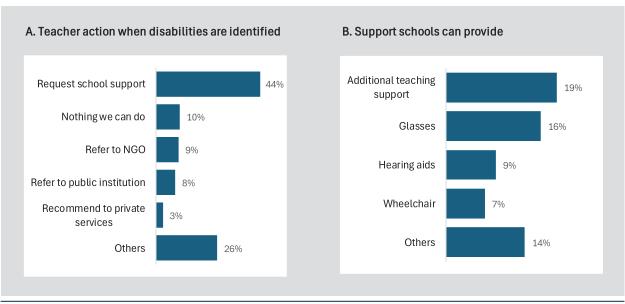
166. One-quarter of teachers in the 2024 survey reported having students with disabilities in their classes; see Figure 75. The most common disabilities reported by teachers are visual impairments (12 percent of the classes), intellectual disabilities (9 percent of the classes), and hearing impairments (6 percent of the classes), with visual impairments particularly more prevalent in urban areas. Despite the prevalence of the reported disabilities, only 4 percent of teachers indicated having access to diagnostic tools for disability identification. Most of these tools were designed for identifying visual impairments and were typically used only once a year or less. However, school principals surveyed in 2024 reported a higher percentage of diagnostic tools available at schools for visual impairment (13 percent of schools) and hearing impairment (4 percent of schools).

Figure 75: Students with disabilities and access to diagnostic tools (n = 727)



167. The access to school support for students with disabilities reported by teachers was noticeable, considering the limited access to the identification tools mentioned earlier. From teachers surveyed in 2024 (n = 727), most consider that if students with disabilities are identified, the most common possible intervention is to request support from the school (44 percent), whereas referrals to public institutions (8 percent) or NGOs (10 percent) are less common. According to teachers, support provided by schools for students with disabilities includes additional teaching materials (19 percent), eyeglasses (16 percent), hearing aids (9 percent), and wheelchairs (7 percent). Furthermore, 44 percent of primary school teachers indicated that their classrooms are accessible for students with mobility disabilities, and, according to school principals, 63 percent of toilets are accessible for students with mobility disabilities. However, only 4 percent of teachers indicated having teaching or learning materials designed for students with disabilities. Access to these materials is particularly low in schools in disadvantaged areas (3 percent) and rural areas (4 percent), compared to schools in urban areas (7 percent); see Figure 76.

Figure 76: Actions and plausible support from schools for students with disabilities reported by teachers (n = 727)



Source: 2024 World Bank Teacher Survey.

Pre-service and In-service Training on Inclusive Education

168. Most teachers report not having received any (pre-service or in-service) training on inclusive education. However, some progress has been made in providing inclusive education training to primary school teachers. In the 2024 survey, 43 percent of teachers indicated they received (some) pre-service training on inclusive education as part of the pedagogic degree curriculum (although most of these training courses are introductory in nature and focus on disability awareness and the identification of students with disabilities), and 27 percent of teachers reported receiving some inservice training. Contract teachers, in particular, had limited access to inclusive education training, as only 10 percent indicated receiving (some) pre-service training, and only 5 percent indicated receiving in-service training on the topics related to inclusive education.

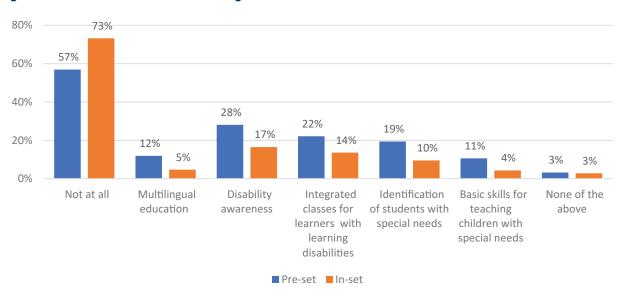
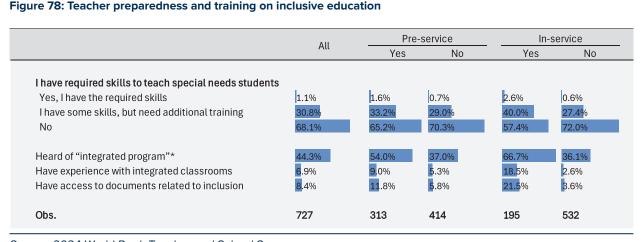


Figure 77: Pre-service and in-service training on inclusive education

Source: 2024 World Bank Teacher and School Survey.

169. Only 1 percent of teachers are confident 'they have the required skills' to teach students with special needs, and two out of three teachers feel they 'lack the required skills'. Most teachers in the 2024 survey (68 percent) feel they 'lack the required skills' to teach students with special needs, and 31 percent of teachers indicated having 'some skills but need additional training'; see Figure 78. Only 1 percent of the teachers felt confident they have the skills required to teach students with special needs.



Source: 2024 World Bank Teacher and School Survey.

Note: * Refers to regular schools with special classes for students with disabilities.

170. Younger teacher cohorts have received more pre-service training on inclusive education than older cohorts. Among teachers (excluding contract teachers) ages 19–29, 80 percent reported having received some form of pre-service training related to inclusive education, compared to less than 40 percent of teachers over the age of 40; see Figure 79. Additionally, over half of the teachers ages 19–29 reported receiving training on disability awareness during their teacher training programs, which is more than double the rate reported by teachers over 40 years. More than half (54 percent) of the teachers ages 19–29 received training on disability awareness, and 48 percent were trained on integrated classes for learners with disabilities.

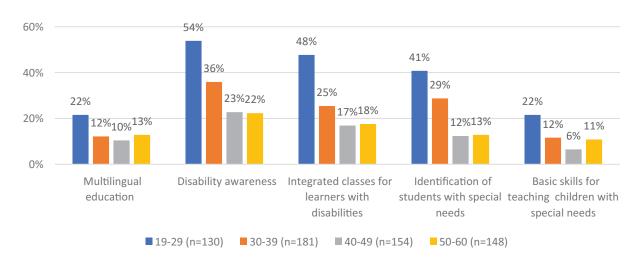


Figure 79: Pre-service training on inclusive education by age group (excluding contract teachers)

Source: 2024 World Bank Teacher and School Survey.

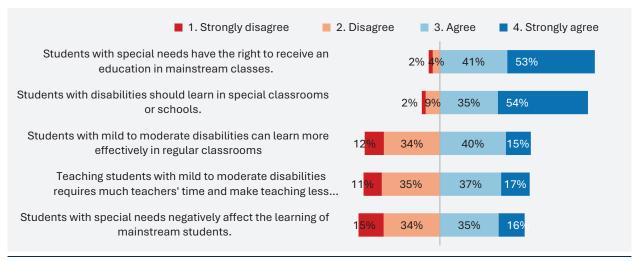
171. Only 8 percent of teachers surveyed in 2024 reported having access to documents related to inclusive education, with less than 2 percent of contract teachers reporting having access to these resources. However, when teachers who reportedly had access to documents were asked to specify the documents related to inclusive education, more than one-third (35 percent) could not name any.

Teacher Perception on Inclusive Education

172. While there is strong support for the right to an education for students with special needs, there are noticeable concerns among teachers regarding the effectiveness and negative impact of inclusive education on mainstream classrooms. Almost all (93 percent) teachers 'agreed' or 'strongly agreed' that students with special needs have the right to receive an education in mainstream classes; see Figure 80. However, 89 percent also 'agreed' or 'strongly agreed' that students with disabilities should learn in special classrooms or schools. In other words, teachers seem to think that students with disabilities are entitled to education, but that it may be best for them (or the regular schools) to study in special schools (as of 2021, only six public schools offer special education programs).⁴⁷

⁴⁷ MoEYS (2021) Report on Inclusive Education in Cambodia.

Figure 80: Teacher's perceptions of inclusive education



- 173. Teachers are divided on the effectiveness of regular classrooms for students with mild to moderate disabilities and are concerned about the impact of inclusive education on teaching effectiveness. Only 55 percent of teachers 'agreed' or 'strongly agreed' that students with special needs can learn more effectively in regular classrooms, and 54 percent 'agreed' or 'strongly agreed' that this requires a lot of the teacher's time and makes teaching less effective.
- **174.** Somewhat surprisingly, an analysis of teachers' opinion on inclusive education does not reveal any discernible (and statically significant) pattern across age groups. Younger teachers, despite having received more training on inclusive education, do not have different opinions on the effectiveness and negative impact of inclusive education on mainstream classrooms than older teachers.

Box 4: Ethnic Minorities and Multilingual Classes

Students from ethnic minorities can be found in schools in urban, rural, and disadvantaged areas; however, multilingual classes are rare. Among the 727 teachers surveyed, 16 percent confirmed the presence of ethnic minority groups in their areas. However, only 10 percent had children from ethnic backgrounds in their classes. Urban schools had a higher proportion of children from minority backgrounds (26 percent) compared to rural (9 percent) and disadvantaged (19 percent) areas. The proportions of teachers from ethnic minority backgrounds and those who could speak an ethnic minority language were very low at less than 2 percent. No schools in urban areas conducted multilingual classes, but a fraction of rural classes surveyed (0.3 percent) in 2024 provided multilingual instructions and 2 percent of disadvantaged area classes.

Source: 2024 World Bank Teacher and School Survey.

10.3 Teacher Standards

175. The teacher professional standards aim to develop teachers who are knowledgeable, skilled, morally grounded, and professionally competent. The MoEYS introduced professional standards for teachers in 2010, even before the adoption of the teacher policy in 2013. These standards established benchmarks for teachers' professional knowledge, skills, and attitudes across four key areas: professional knowledge, professional practice, professional study, and professional ethics.

176. Teacher awareness of these professional standards increased significantly between 2012 and 2024. However, it is unclear to what extent teachers know/understand these standards. In the 2012 survey, 52 percent of the teachers surveyed indicated that they had heard of the teacher standards, and 29 percent reported that these standards had been explained to them; see Figure 81. In the 2024 survey, awareness had significantly increased; 86 percent of teachers indicated having heard of the standards and 42 percent indicated that the standards were explained to them. Additionally, 23 percent of teachers reported receiving documents related to the standards, and 27 percent indicated they had read them. However, teachers' knowledge of the standards was not actually tested in the 2024 survey (and the consistency of response patterns suggests that teacher responses were potentially affected by a social-desirability bias).

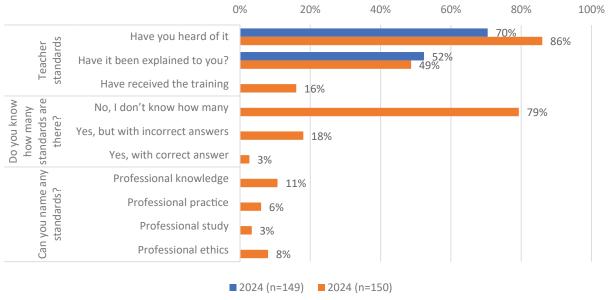
86% 52% 42% 29% 27% 23% Have received the documents Heard of teacher standards Have been explained Have read the standards **■** 2012 **■** 2024

Figure 81: Teacher self-reported awareness of teacher standards (2012 and 2024)

Source: 2012 and 2024 World Bank Teacher and School Surveys.

177. Most school principals are aware of the teacher professional standards, and 16 percent received (some) training on them, but very few principals (3 percent) were able to accurately recall the number of standards or name any of them. In 2024, 86 percent of school principals reported being aware of the standards compared to 70 percent in 2012; see Figure 82. However, only 49 percent of principals indicated the standards had been explained to them, and just 16 percent had received training on the standards. To test their knowledge of the standards, school principals were asked to specify the number of professional standards and name them. Only 3 percent of principals could accurately identify the number of standards (that is, four), 79 percent said they did not know, and 18 percent provided wrong answers. Moreover, very few principals could name any of the standards. The most recognized standard by the 150 school principals surveyed was 'professional knowledge' (11 percent of school principals), followed by 'professional ethics' (8 percent), 'professional practice' (6 percent), and 'professional study' (3 percent).

Figure 82: School principals' awareness of teacher professional standards 0% 20% 40% 60%



11 Discussion and Recommendations

178. This section summarizes the discussion presented in this report and identifies three priority recommendations for policy reform, focusing on the reforms that can further strengthen teaching quality in Cambodia's primary education.

Priority Recommendation 1

The MoEYS and MCS should revise the policy on contract teachers, introduce multiyear contracts, and increase minimum training requirements. The policy should also clarify the purpose of contract teachers, identify criteria for applying this modality, and consider the short-term nature and trade-offs associated with it. Double-shift teaching positions should be fully phased out in the coming years.

- 179. The MoEYS and MCS should revise the policy on 'temporary teacher contract modalities'—
 including contract teachers and double-shift teaching positions—and consider it primarily
 as a short-term policy option. Temporary contract modalities can be a useful and necessary
 component of the teacher workforce as it allows the MoEYS to respond expeditiously to supply
 and demand fluctuations in the education sector. Changing trends in the demand for education
 services (for example, more students switching from public to private education or curriculum
 reforms requiring more teachers in certain subjects) require the MoEYS to maintain flexibility in the
 teacher workforce.
- **180.** Findings of this study suggest that the assumptions underlying the policy to mobilize temporary contracted teachers no longer apply in 2024. Temporary contract modalities have been used in Cambodia's primary education for at least two decades and were initially mobilized in a context of severe scarcity of human capital (that is, the MoEYS was unable to find enough qualified candidates). However, in 2024, these conditions no longer apply; see subsection 4.2, and contract teachers and double-shift teachers are mobilized in areas that appear to have more than enough qualified teacher applicants. The MoEYS needs to revise *why* it needs temporarily contracted teachers, *where* these teachers should be prioritized, and *what* pre-service training and selection criteria apply to these teachers.
- **181.** The MoEYS and MCS should introduce multiyear (for example, 3-year) contracts for contract teachers to address delays in mobilizing them during the start of the school year. The current 10-month contracts for contract teachers cause delays in mobilizing them, as they cannot be trained during the 2-month leave period before starting the school year.
- 182. The MoEYS and MCS should consider the trade-offs associated with mobilizing contract teachers—while there are benefits associated with this modality, international lessons learned suggest these are not sustainable and its use is not recommended for medium- to long-term education policy. The contract teacher modality is used in Organisation for Economic Co-operation and Development (OECD) countries as well as low-income countries in Sub-Saharan Africa. The modality includes a variety of teachers, also reflected within Cambodia's current contract teacher workforce, as it includes young, motivated teachers often with a bachelor's degree but without pedagogic training and retired teachers as well as locally recruited rural teachers without adequate certificates. A recent study in India found increased levels of effort by contract teachers in government schools associated with better student performance.⁴⁸ Another study

⁴⁸ Goyal and Paney 2024, 11.

in India suggests that putting teachers on probationary periods (of 3 to 5 years and framed as apprenticeships) can promote effort if low-performing probationary teachers can be removed from the system, teacher performance is measured systematically, and there is broad-based support for the policy.⁴⁹ Contract teachers are typically mobilized at substantially lower costs than regular civil servant teachers (due to less generous remuneration packages), making them an attractive option for addressing high student-teacher ratios in low-income countries.⁵⁰ However, sustained inequality in remuneration may build grievances within the teacher workforce and may eventually result in teacher strikes (see, for example, the teacher strikes in Morocco in 2023).⁵¹

- 183. Cross-country studies on the use of contract teachers highlight several elements of contract teacher policy that require the attention of decision-makers. First, clarify the status and employment rights of contract teachers and a standardized and rigorous selection process. Second, improve data and information on contract teachers, including their recruitment, deployment, and training needs to monitor the stock of contract teachers. Third, review training and support modalities, including quality assurance guidelines and a protocol for training contract teachers. Fourth, support contract teacher preparedness for classroom practice. Fifth, rationalize and coordinate contract teacher salaries and compensation (and ensure they receive a minimum living wage). And finally, incentivize and motivate contract teachers, with opportunities for career advancement and pathways to regularize contract teachers into the civil service.⁵²
- 184. The MoEYS and MCS should (continue to) fully phase out double-shift teaching positions. Double-shift teaching positions are considerably more expensive than contract teachers as they typically cost KHR 14.6 million (US\$3,650) per year, whereas contract teachers typically cost around KHR 11.7 million (US\$2,925) per 10 months. Moreover, although there have been few scientific studies on double-shift teaching, such positions are presumably less effective than regular civil servant or contract teachers as 48 hours of in-class teaching per week would strain and exhaust most individuals, impeding their ability to provide quality education. In Hong Kong SAR, China; Singapore; and the Republic of Korea, where there is no shortage of qualified teachers, governments have prohibited double-shift teaching (that is, one teacher teaching two shifts on a single day) because they fear this adversely affects teaching quality.⁵³
- 185. Double-shift teaching positions create perverse incentives and increase vulnerabilities to abuse. In one rural primary school visited for this study, all teachers as well as the school principal and deputy principal were teaching an additional shift (and thus also earning almost double the income of typical school level staff), whereas the number of enrolled students in each grade was right on or slightly higher than (what the school management perceived to be) the benchmark for creating two classes (out of one). A slight decrease in student enrollment should reduce the number of classes and thus would significantly reduce the income of the teachers and/or the school management. This creates a perverse incentive to inflate student numbers (for example, by not unenrolling students who are permanently absent) to maintain a level of income. Importantly, the teachers reported that their selection had been competitive and that there were many candidates applying for the vacancies at this particular school, raising questions about why all additional vacancies had been filled by double-shift positions of existing staff rather than additional contract or civil servant staff.

⁴⁹ Muralidharan 2015.

⁵⁰ UNESCO 2020, 82.

⁵¹ Morocco World News 2024.

⁵² UNESCO 2020, 70-80.

⁵³ Bray 2008, 26 and 48.

- **186.** The MoEYS should consider fast-tracking female school principals, to address the comparatively low female representation in school management. In 2023, three out of five primary school classes were taught by a female teacher, whereas less than one out of five primary school managers (principals and deputy principals) is female. This gender parity gap between teachers and school managers cannot be explained by other factors (such as age) and seems to be the result of gender preferences in the principal selection or the principal pre-service training selection process (although more detailed data is required to accurately identify the cause of this divergence). Despite this, the MoEYS should ensure that female teachers aspiring to become school principals should not be restrained in their ambitions and ensure that the sizable female teacher workforce also see themselves reflected in their schools' leadership.
- 187. The MoEYS should anticipate considerably higher turnover in the civil servant teacher workforce in the coming decade, compared to the preceding decade, which has implications for pre-service teacher training needs as well as the potential for introducing (unpopular) teacher HR management reforms; see: Instruction Time and Student Learning Can Cambodia improve Learning Outcomes by Introducing Full-day Lesson Schedules in Primary Schools? (2025) for a discussion on the latter. Around 33 percent of the civil servant teachers (22 percent of the total positions in the primary school teacher workforce) are expected to retire or leave the teacher workforce by 2033. Moreover, 33 percent of the primary teacher positions in 2023 were temporary and are annually renewed (through open competitive recruitment). Assuming the size and composition of the workforce remains the same, only 45 percent of the workforce in 2033 had already received preservice training in 2023, and 55 percent have not yet been through pre-service training.
- **188.** The MoEYS could decide to use the expected higher turnover to adjust the composition of the teacher workforce and increase the share of temporarily contracted teachers. As the MCS, MEF, and MoEYS have publicly stated their intention to increase the share of contract teachers in the workforce, the relatively high turnover until 2033 could be used to increase the share of temporary contracts to 55 percent (assuming the primary school teacher workforce is not expanding).

Priority Recommendation 2

The MoEYS and MCS should increase the pay difference between teachers with varying experience, qualifications, and performance and develop a long-term teacher remuneration strategy, aiming to increase the weekly work hours of primary school teachers and reduce the prevalence of secondary jobs. The strategy should critically review rural relocation incentives, premiums for upgrading qualifications, and stipends to teach additional lessons and ensure incentives are adequate and effective in incentivizing teacher behavior.

189. The MoEYS and MCS should decompress teacher pay, based on a critical review of the MoEYS' current strategic objectives and the requirements to incentivize teacher behavior. Remuneration reforms have resulted in a wage premium for primary teachers and improved pay delivery and compliance. However, the teacher pay scale has become so compressed that the difference between pay for the most junior and most senior primary school teacher is almost negligible and many allowances meant to incentivize teacher behavior have lost their power. Before adjusting allowances, however, the MoEYS should critically review its objectives and the need to incentivize teacher behaviors. The remote (relocation) allowance seems to have become redundant, as enough qualified teacher trainees can be attracted to work in remote schools. Instead, the MoEYS could consider incentivizing teachers enrolling in INSET courses and certain bachelor's degree

programs (beneficial for student learning) or teachers promoting along teacher tracks in the TCPs; discussed in subsection 7.1. However, the MoEYS should be cognizant that once incentives and allowances are introduced, it is difficult to roll back or discontinue them and it should therefore aim to limit incentives to only those that are absolutely necessary.

- 190. The MoEYS, working with Cambodia's teacher associations, needs to develop a long-term teacher remuneration strategy to increase the weekly work hours of primary school teachers for their primary teaching jobs (and reduce the prevalence of primary school teachers earning additional income through secondary jobs) and include this into any future consideration on salary or allowance adjustments. The high prevalence of secondary jobs reported by primary school teachers likely results in more teacher fatique and absenteeism and a decline in education quality. It also limits the MoEYS' ability to ask teachers to teach more hours per week and to create fullday lesson schedule configurations; see Instruction Time and Student Learning - Can Cambodia improve Learning Outcomes by Introducing Full-day Lesson Schedules in Primary Schools? (2025) for a more detailed discussion.
- 191. Although secondary jobs for teachers might have been necessary for primary school teachers in 2012 to substitute their incomes, as many would otherwise live in poverty, this is no longer true in 2024. Public primary school teachers are now receiving a wage premium compared to other employment categories that require similar qualifications, even though data from this study suggests that teachers are not working full time (like their peers in other employment categories). Rectifying this imbalance will be challenging as teachers will likely resist working more hours for the same salary; see Instruction Time and Student Learning - Can Cambodia improve Learning Outcomes by Introducing Full-day Lesson Schedules in Primary Schools? (2025). However salary adjustments can be used as levers to promote compliance with teacher weekly teaching and working hour norms, and a long-term remuneration strategy should make pay increases conditional on teachers progressively committing more time to work in their public schools.

Priority Recommendation 3

The MoEYS should ease entry restrictions into the teacher workforce and the pre-service pedagogic training programs, allowing professionals with university degrees to become teachers through a teacher licensing system and allowing noncivil servant candidates to enroll in teacher training facilities. The MoEYS should shift its focus to ensuring the quality of licensed teachers and the quality of pedagogic degree programs and its graduates.

192. The MoEYS should open up the pre-service pedagogic training facilities to contract teachers (if they need additional pedagogic training) as well as other trainees who have not been appointed to civil service positions. Currently, the policy to only train graduates who have already been appointed to civil servant positions is the primary reason there are still young but underqualified teachers (that is, lacking 2 years of pedagogic training) in the primary school teacher workforce. Especially in the context of plans to expand the share of temporarily contracted teachers and the need to phase out double-shift positions, a large part of the teacher work force will remain critically underqualified if the MoEYS does not provide appropriate pedagogic training to this group of teachers.

- 193. Restricting pedagogic training programs (and certificates) to civil service appointed trainees creates inefficiencies and perverse incentives. Since 2015, pre-service primary teacher training intake averaged around 1,200 trainees per year (across PTTCs as well as the teacher education colleges in Phnom Penh and Battambang), *unless* a decision is taken to freeze civil servant recruitment. In 2020, 2022, and 2024, no new trainees were admitted to the pedagogic training facilities. Most training facilities have been half empty since 2020, training only one student cohort (instead of two in a 2-year program) while maintaining full staff (teacher trainers) and facilities. Thus, while these facilities had excess capacity and at least some of the more than 12,000 contract teachers could have received pedagogic training, the training facilities remained empty. Moreover, private school teachers are required to have a pedagogic degree, but they can only acquire these certificates while applying for public school civil servant positions. Only former and current public school teachers are adequately certified to teach at private schools, effectively creating a 'static teachers guild' instead of a competitive open labor market.
- **194.** The MoEYS should reevaluate the need to provide scholarships/stipends to pre-service teacher trainees. The MoEYS currently provides monthly stipends/scholarships to enrolled teacher trainees. Section 4 has demonstrated that the teaching profession has become attractive, and the MoEYS has succeeded in attracting high-scoring high school graduates. It is uncommon for other vocational and tertiary degree programs to provide such financial incentives, especially for professions with so many qualified applicants, and it is unclear if these incentives are necessary. The MoEYS should reevaluate the need for this policy and potentially sharpen its application by limiting incentives to trainees from rural areas *only* (as these trainees incur additional costs living in dormitories and away from their families).
- 195. More broadly, the MoEYS should consider easing entry restrictions into the teacher workforce and introduce a teacher licensing system that enables professionals with university degrees to become teachers. A teacher licensing system would provide much-needed flexibility to Cambodia's teacher labor market, and it would optimize the time and cost efficiency of pre-service training. A teacher licensing approach should provide flexibility by not requiring specific TTI credentials. Instead, it should focus on demonstrated competency through testing and ongoing development, allowing qualified individuals from various academic backgrounds to enter the teaching profession. Licensed teachers can apply directly for teaching positions at schools, creating a more accessible pathway while maintaining professional standards.
- **196.** Based on best practices in the East Asian region, teacher licenses should be issued if candidates meet the following criteria: (a) candidates must hold an academic certificate (for example, a bachelor's degree), with additional credits in educational professions; (b) candidates must demonstrate competency by passing both subject-matter and pedagogical tests; and (c) candidates must agree to comply with the country's Education Code of Conduct, ensuring professional and ethical standards. License validity should be periodically renewed (for example, every 3 to 5 years), with renewal contingent upon CPD (for example, completing 30 hours of annual training as is required in Japan) and satisfactory annual performance appraisals. The system would promote continuous learning and maintain teaching quality throughout an educator's career.

⁵⁴ The 2023 approved number of new teachers were eventually recruited in 2024.

- 197. The MoEYS should prepare for larger cohorts of pre-service teacher trainees, especially if it decides to provide more extensive pedagogic training to contract teachers as well. Since 2015, the number of primary school teacher trainees has averaged around 1,200 each year, across all training facilities (PTTCs as well as PTEC and BTEC). The average annual need for newly trained teachers, going forward to 2033, will likely go up to around 1,640, based on expected civil servant attrition alone. Moreover, if the MoEYS decides to provide more extensive (or full) pedagogic training to contract teachers as well, the average annual need for pre-service primary teacher training would go up to at least 4,000 (assuming all contract teachers need to receive training by 2033 and none of them leave the workforce until 2033). If the MoEYS decides to expand the teacher workforce (for example, to staff a full-day lesson schedule configuration), it would need still more capacity to train teachers (unless alternative entry points into the workforce are created). More generally, forecasting teacher training needs is required to make optimal use of pre-service training facilities and avoid training institutes being idle during periods when civil service recruitment is halted.
- 198. Now that most new (civil servant) primary teachers meet the minimum qualification criteria, the MoEYS should shift its focus to ensuring the quality of pedagogic degree programs and graduate teacher trainees. In addition to investing in the quality of pre-service training, the MoEYS should introduce standardized entry and exit exams across all PTTCs (as well as PTEC and BTEC). This will allow the MoEYS to more closely monitor the performance of training facilities and flag severe underperformance (for example, when trainees make little progress on tests after completing a 2-year program). It will also help with assessing the impact of introducing a 4-year program (at PTEC and BTEC), and it could help with measuring the extent to which training facilities have implemented curriculum reforms. The MoEYS should also identify minimum standards in content knowledge and pedagogy competencies for PTTC graduates to ensure a minimum level of quality of new entrants into the workforce. The final exams of the pedagogic degree program, rather than the current entry test, should be used to select qualified candidates and ensure the quality of newly trained teachers.

Additional Recommendations

199. The MoEYS should consider the international lessons learned on CPD elements that are critical to boost student learning. Teacher professional development programs are the principal tool that governments use to upgrade teacher skills, yet the evaluated programs show highly varying results. Studies and impact evaluations on teacher professional development programs identified several elements of CPD that are critical to promote student learning. A review of nearly three dozen studies on teacher development programs found that they are more likely to boost student learning when the programs (a) had a specific subject focus (for example, training teachers on how to teach algebra or early-grade reading better instead of 'general' pedagogy); (b) incorporated lesson enactment into the training (it is not enough to tell teachers the principles; they need to practice with other teachers before getting back to their classrooms); (c) had an initial face-to-face component (that is, professional development that is entirely virtual tends to not work); and (d) had follow-up visits (or some kind of coaching) to help teachers transition skills from training to their day-to-day practice. In addition, the review suggests it is key to link participation in CPD programs to career incentives.⁵⁵

⁵⁵ Popova et al. 2022.

- **200.** Regionally, most in-service teacher training programs lack the key elements of effective teacher development programs, and the relation with student learning is weak. INSET programs in many East Asian and Pacific middle-income countries lack the key elements of effective programs mentioned above and a World Bank analysis of the 2019 SEA-PLM student assessment data finds only a weak association between teacher in-service training and student performance on these standardized assessments. Furthermore an evaluation of World Bank projects supporting teacher development underlined the importance of embedding programs into the education system, the availability of strong instructional leadership, and the scaling-up of both in terms of coverage and depth to promote sustainability. Fig.
- 201. The MoEYS should review existing CPD policies, build consensus around the financing and implementation of a single CPD framework, and raise awareness among teachers and school managers. Over the past decade, the MoEYS has developed a fairly extensive body of policies, regulations, guidelines, handbooks, and a credit system for CPD. However, not all the technical work, policies, and plans have been translated into actual CPD activities reaching the teachers at the school level. It seems that in some cases, policies and plans were developed without adequate funding for implementation, and as a result, few teachers have heard of the initiatives, and even fewer have participated in it even though some of these CPD initiatives were approved at least several years ago. Raising awareness on CPD opportunities and involving school principals will be important to ensure broader coverage and participation in professional development programs. The MoEYS could also decide to make CPD a more explicit component of a teacher's workload (for example, identifying a mandatory minimum number of CPD hours per year, as is common in other countries). In addition to teaching skills and student learning outcomes, a CPD framework should be linked to incentives/career advancement and promote professional status and job satisfaction.
- 202. Moreover, the MoEYS should reduce the fragmentation of CPD responsibilities across MoEYS departments. The expansive CPD framework has assigned responsibilities for management, oversight, and implementation of CPD activities to multiple MoEYS departments, including the Directorate General for Teacher Education and Development, Primary Education Department, and the CPDMO under the personnel department. This institutional fragmentation seems to also lead to policy fragmentation and might also diffuse overall CPD responsibilities. In late 2024, organizational restructuring of the MoEYS led to some consolidation of CPD responsibilities under an upgraded teacher training general directorate.
- 203. The MoEYS should strengthen its stewardship role in donor-funded CPD, by ensuring that INSET course content has proven to boost student learning, is aligned with its strategies, and links to the TCPs. Findings in this study show that 82 percent of teachers attended at least one INSET course over the past 5 years; however, the distribution is unequal and appears somewhat haphazard (possibly as the result of individual DPs having different priorities). The MoEYS should identify proven INSET investments in lesson methods and education practices, for example, similar to the early grade learning (EGL) courses and ensure that investments from DPs are aligned to its priorities. Other professional development programs have a proven track record internationally, for example, teaching at the right level and supporting teachers with structured pedagogy (lesson

⁵⁶ Afkar et al. 2023.

⁵⁷ World Bank 2019a.

plans).⁵⁸ In this regard, the MoEYS' coordination and leadership in the rollout of EGL methods and training (initially developed as part of a program funded by the United States Agency for International Development [USAID]) is commendable. The planned direct management in implementation of EGL courses by the MoEYS could help further institutionalize INSET standards and capacity within the MoEYS. The MoEYS might decide to target or prioritize a subset of teachers, where the aim should be to promote student learning outcomes.

- 204. The MoEYS should invest in on-site teacher mentoring and coaching, and it should regulate the Thursday technical meetings by developing guidelines or a curriculum and provide external coaches to support pedagogic development of teachers. Findings in this study suggest that the Thursday meetings are organized irregularly and to varying degrees across schools. Moreover, teachers do not perceive these meetings as useful as INSET courses. To strengthen the impact of these meetings, the MoEYS should ensure compliance with monthly meetings and provide more guidance on the content of these meetings as well as additional instruction or coaching from education experts outside of the school. Similarly, the MoEYS should decide if it intends to fully roll out the mentoring framework under the teacher PLCs, and if so, it should ensure sufficient funding so that senior teachers and education experts can be adequately compensated and incentivized to mentor more junior teachers. If adequate financing for individualized coaching cannot be found, the MoEYS should explore alternative coaching and mentoring options, including virtual coaching.
- 205. The MoEYS should fully leverage the desire of primary teachers to upgrade their academic qualifications and obtain bachelor's degrees, by facilitating or incentivizing degree programs relevant and beneficial for education quality. A remarkable share of primary school teachers obtained a bachelor's degree after becoming a teacher (27 percent) or are currently enrolled in a bachelor's degree program (8 percent). Currently, this desire of teachers to upgrade their qualifications to university degrees appears to be primarily motivated by the associated societal respect or appreciation rather than any MoEYS incentive. However, the MoEYS should incentivize teachers pursuing bachelor's degrees for programs that are beneficial to teaching. For example, the MoEYS could select degree programs (for example, from NIE or RUPP) with particular relevance to teaching and include the certificates of these programs as requirements for promotion in the TCPs. With primary teachers already willing to invest their personal time in upgrading their qualifications, minor incentives could be enough to nudge them toward selecting degree programs with more benefits for their students. The MoEYS should identify which degree programs are desirable and beneficial and ensure incentives are strictly linked to CPD that has impact on teaching quality.
- 206. Moreover, the MoEYS should develop a realistic and fiscally affordable ICT strategy for primary schools, identifying the ICT infrastructure the government can afford to procure and maintain for primary schools and the ICT skills that students should acquire at the end of grade 6. Although some primary schools already have computer labs (typically donated by NGOs or local business leaders), the MoEYS might decide that procuring and maintaining computer labs for over 7,000 primary schools is not fiscally affordable but instead choose to ensure that each school has one computer or tablet available for teaching an introductory ICT course. The MoEYS should ensure that the pre-service primary teacher training curriculum is aligned with this ICT strategy and that ICT training modules are integrated in INSET courses to ensure that teachers have the necessary ICT skills for teaching. ICT training could also be integrated into the mentoring programs at schools or cluster schools.

See: World Bank (2020). On the effectiveness of teacher guides and scripted lessons plans see, for example, Piper et al. (2018). On the effectiveness of teaching at the right level, see, for example, Banerjee et al. (2017).

- 207. The MoEYS should leverage existing ICT skills and infrastructure by developing mobile-friendly digital teaching materials. Although primary teachers are often unfamiliar with the use of computers and their applications (for example, Microsoft Office, email), they are more familiar with smartphones and their applications (for example, Telegram, QR payments, and so on). The MoEYS should use this as an entry point to facilitate the use of ICT in teaching. The MoEYS could develop and distribute mobile-friendly digital teaching materials and resources that can help teachers integrate technology in classrooms. Moreover, the MoEYS could optimize the impact of existing school infrastructure by making better use of existing computers in schools and ensuring teacher access to these computers.
- 208. The MoEYS should ensure the effective integration of an inclusive education model in preservice primary teacher training and aim to provide INSET to teachers who have not yet received it (INSET or pre-service training). The MoEYS should develop a standardized 'take-home' package that includes (a) diagnostic tools and/or methods, (b) instructions on how to use the tools and how often, and (c) a decision tree on actions to take in case students are diagnosed with disabilities. The training and take-home package should clearly communicate the MoEYS policy on integrating students with disabilities and identify the services and teaching materials that should be made available at schools (for example, specialized learning materials, eyeglasses, hearing aids) and those available at other public institutions.
- 209. 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 collect more detailed data on teacher training applicants and trainees (to assess the caliber of applicants and the attractiveness of the profession) and attrition (to better forecast teacher training needs). It should also more extensively test teacher trainees (at entry and exit) and analyze test results to assess the performance of training facilities and the impact of different degree programs. It should also aim to synchronize datasets (payroll, HRMIS, and EMIS) to enhance reliability.

Table 4: Overview of Recommendations

Priority Recommendation 1:

The MoEYS and MCS should revise the policy on contract teachers, introduce multiyear contracts, and increase minimum training requirements. The policy should also clarify the purpose of contract teachers, identify criteria for applying this modality, and consider the short-term nature and trade-offs associated with it. Double-shift teaching positions should be fully phased out in the coming years.

- Revise the policy on contract teachers.
- Introduce multiyear (for example, 3-year) contracts for contract teachers.
- Consider the trade-offs associated with mobilizing contract teachers.
- Fully phase out double-shift teaching positions and fast-track female school leaders.
- Anticipate considerably higher turnover in the civil servant teacher workforce.

Priority Recommendation 2

The MoEYS and MCS should increase the pay difference between teachers with varying experience, qualifications, and performance and develop a long-term teacher remuneration strategy, aiming to increase the weekly work hours of primary school teachers and reduce the prevalence of secondary jobs. The strategy should critically review rural relocation incentives, premiums for upgrading qualifications, and stipends to teach additional lessons and ensure incentives are adequate and effective in incentivizing teacher behavior.

- Decompress teacher pay, based on a critical review of current HR strategic objectives.
- Develop a long-term strategy to increase the weekly work hours of primary school teachers.

Priority Recommendation 3

The MoEYS should ease entry restrictions into the teacher workforce and the pre-service pedagogic training programs, allowing professionals with university degrees to become teachers through a *teacher licensing system* and allowing non-civil servant candidates to enroll in teacher training facilities. The MoEYS should shift its focus to ensuring the quality of licensed teachers and the quality of pedagogic degree programs and its graduates.

- Open up the pre-service pedagogic training facilities to contract and non-civil servant teachers.
- Reevaluate the need to provide scholarships/stipends to pre-service teacher trainees.
- Ease entry restrictions into the teacher workforce.
- Introduce a teacher licensing system.
- Prepare for larger cohorts of pre-service teacher trainees
- Focus on ensuring the quality of pedagogic degree programs and its graduates.

Additional Recommendations

- Invest in on-site teacher mentoring and coaching.
- Leverage the desire of teachers to upgrade their qualifications.
- Strengthen data management and testing practices.

12 Appendices

12.1 Bibliography

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12.2 Methodology School and Teacher Survey

Sampling and Samples

- To compare the school and teacher survey conducted by the World Bank in 2012, this 2024 survey followed 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:
 - Student Attendance Form
 - Teacher Attendance Form
 - School Principal Survey
 - Classroom Observation
 - Teachers' Survey
 - Teachers' Math Test
 - Community questionnaires.
- 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.
- For classroom observations, two teachers were selected: one teaching Khmer and one teaching mathematics. 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).
- 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 and pedagogy content. Enumerators provided initial instructions but were not allowed to provide 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 expired. Of the 727 teachers surveyed in 2024, 725 participated in the mathematics test.
- For the community survey, four members of the school management committee (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 5: Sample sizes by data collection instrument for the 2012 and 2024 surveys

	Unit	2024	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

- 6. 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.
- 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.

12.3 Classification of Disadvantaged Areas

- **8.** 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.
- 9. 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.
- **10.** 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. The Personnel Department of MoEYS is currently revising the information based on updated criteria.
- 11. 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.

12. 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.

12.4 Teacher Trainees' Data Matching

- 13. To assess the attractiveness of the teaching profession, this study uses the performance of primary school teacher trainees in the grade 12 national examination as a proxy for evaluating the academic caliber of those recruited between 2014 and 2024. Since the Department of Teacher Training (TTD) lacks detailed records of teacher trainees' academic backgrounds, it was necessary to match TTD data with the grade 12 examination database maintained by the Department of Exam Affairs (DEA).
- 14. The TTD provided lists of all teacher trainees by training center for 2014 to 2021, while the Ministry of Civil Service (MSC) supplied the 2024 cohort list. It should be noted that there was no primary school teacher recruitment in 2020 and 2022, and the 2023 recruitment was delayed until 2024. All lists were provided as scanned PDFs and required digitization and data cleaning. In total, records for 14,218 teacher trainees across eight cohorts were compiled, including each trainee's name, date of birth, and gender.
- **15.** The DEA provided the grade 12 exam results database for 2014 to 2023. This database includes candidate names, dates of birth, genders, overall grades, and percentile ranks. Due to COVID-19, the 2020 examination was cancelled, and all students received a passing grade without specific grades or percentile ranks. Additionally, in the 2022 and 2023 databases, only passing students were included. However, since passing grade 12 is a prerequisite for recent teacher recruitment, this omission should not pose a significant issue. The exam database encompasses a total of 1,025,786 candidates across 10 years.
- 16. The list of teacher trainees for each cohort was matched with the pooled exam database using name and date of birth as matching variables. The unmatched rate for the 2014 TTC cohort was notably high, with nearly 50 percent (1,618 out of 3,253) of candidates unmatched. This high rate is attributed to the examination reforms implemented in 2014, which means that results before 2014 were unavailable for matching. Additionally, in the past, candidates recruited under quotas for disadvantaged areas were not required to complete grade 12.
- 17. After 2014, matching rates improved, fluctuating between 76 percent and 93 percent. As shown in Table 6, while the majority of records are perfect matches between the two datasets, multiple matches for certain teacher trainees appear in the exam database. Two scenarios could explain these multiple matches: first, instances where different individuals share the same name and birth date in the exam database, and second, cases where the same individual retakes the exam after failed attempt(s). Given that most candidates with multiple matches had failing grades, the latter scenario is likely the primary reason for the multiple matches. Therefore, both single and multiple matches are used to assess the academic caliber of teacher trainees.

Table 6: Matching results by teacher trainee cohorts (2014 to 2024)

Year	No Match	Single Match	Multiple Matches	Total
2014	1,618	1,398	532	3,548
2015	210	1,570	60	1,840
2016	136	1,352	48	1,536
2017	292	1,379	125	1,796
2018	252	1,307	79	1,638
2019	254	1,302	73	1,629
2021	334	893	319	1,546
2024	99	1,243	10	1,352
Total	3,195	10,444	1,246	14,885

Source: Data from TTD and DEA.

18. Including multiple matches, 1,930 exam takers were identified in the exam databases, of whom 1,580 (82 percent) are from the 2014 recruitment year (see Table 7). The remainder were found in subsequent years, beginning in 2015. This indicates that several teachers recruited in 2014 initially failed the grade 12 exam but subsequently retook and passed it. Notably, there were no such cases in 2015, a year when high-performing students (scoring A, B, or C) were automatically admitted into the PTTC. In 2015, 95 percent of the matches are from the exam results of the same year. In 2021, none of the matches are from the 2021 exam database, as the exam was delayed and held after the recruitment period.

Table 7: 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: Data from TTD and DEA.

12.5 Priority Recommendations

Priority Recommendation 1:		Timeline		dwl	Implementation	ion	Respo	Responsible Agency	ency
Revise the policy on contract teachers	Short-Term	Medium-Term	Long-Term	Technical Complexity	Financial Cost	Implementation Sensitivity	MoEYS	MCS	Other
Clarify the purpose of contract teachers, identify criteria for applying this modality, and increase minimum training requirements.	>			+	+	+	7	7	
Recruit contract teachers only as a 'transitional' short-term policy option – considering the trade-offs associated with it.	7			‡	+	‡	7	>	
Introduce multi-year (e.g. 3-year) contracts for contract teachers to address delays in mobilizing them during the start of the school year.	>	7		+	+	+	7	>	
Fully phase out double shift teaching positions and plan for considerably higher turnover in the civil servant teacher workforce in the coming decade.	٨	7	>	‡	‡	‡	٨	7	Teacher training colleges
Priority Recommendation 2:		Timeline		lmp	Implementation	ion	Respo	Responsible Agency	ency
Focus future teacher remuneration reforms on effort and performance	Short-Term	Medium-Term	Long-Term	Technical Complexity	Financial Cost	Implementation Sensitivity	MoEYS	MCS	Other
Review the MoEYS' strategic objectives and the requirements to incentivize teacher behavior – and ensure incentives are adequate and effective.	>			+ + +	‡	† † †	~	7	MEF
Increase the pay difference between teachers with varying experience, qualifications, and performance.	>	7	7	‡ ‡	‡	‡	>	>	MEF
Develop a long-term teacher remuneration strategy to reduce the prevalence of secondary jobs and increase the weekly hours teachers work for their primary teaching jobs.	>	7	>	‡ ‡	+	† † †	7	>	

Priority Recommendation 3:		Timeline		lmp	Implementation	ion	Resp	Responsible Agency	Jency
Ease entry into teacher training and the teacher workforce	Short-Term	Medium-Term	Long-Term	Technical Complexity	Financial Cost	Implementation Sensitivity	MoEYS	MCS	Other
Open pre-service pedagogic training facilities to contract teachers (if they need additional pedagogic training) as well as other trainees that have not been appointed into civil service positions.	7	7		+	+ + +	+	7		
Reevaluate the need to provide scholarships / stipends to pre-service teacher trainees.	7			++	+	+	>	>	
Ease entry restrictions into the teacher workforce and introduce a <i>teacher licensing</i> system that enables professionals with university degrees to become teachers.	7	>		‡	+	+	7	7	
Prepare for larger cohorts of pre-service teacher trainees — especially if the MoEYS would decide to provide more extensive pedagogic training to contract teachers as well.	7	7	>	‡	‡	+	7		Teacher training colleges
Focus on ensuring the quality of pedagogic degree programs and its graduates (e.g., exit exam at the end of pre-service training) – now that most new teachers meet the minimum education qualification criteria.	7	7	>	‡ ‡	‡	+	7		Teacher training colleges
		Timeline		lm gml	Implementation	ion	Resp	Responsible Ag	Agency
Additional Recommendations:	Short-Term	Medium-Term	Long-Term	Technical Complexity	Financial Cost	Implementation Sensitivity	MoEYS	MCS	Other
Align the continuous professional development (CPD) framework to international lessons learned on what boosts student learning.	>			‡	+	+	7		
Build consensus around the financing and implementation of a single CPD framework, strengthen MoEYS stewardship of donor funded CPD, ensuring INSET course content has proven to boost student learning, and links to the teacher career pathways.	7	7		‡	‡ ‡	+	7		MEF
Invest in onsite teacher mentoring and coaching by developing guidelines and a curriculum and deploying qualified coaches to support pedagogic development of teachers.	>	>		‡	‡	+	>		
Fully leverage the desire of primary teachers to upgrade their academic qualifications and obtain bachelor's degrees — by facilitating or incentivizing degree programs relevant and beneficial for education quality.	7	7	>	+	+	+	7	7	
Develop a realistic and fiscally affordable ICT strategy for primary schools and ensure integration of inclusive education into pre- and in-service training modalities.	>	>		‡	‡	+	7		
Strengthen data management and testing practices to develop a more robust knowledge foundation for decision-making and policy development.	>	>		‡	‡	+	>	>	

