



Policy Goals

Status

1. Setting Clear Expectations for Teachers

Clear expectations exist for what students should learn and what teachers are supposed to do. However, there is no guidance on use of teachers' working time for participating in nonteaching tasks related to instructional improvement. More than 90 percent of working hours are devoted to teaching.



2. Attracting the Best into Teaching

Teachers are offered competitive pay and accrue retirement benefits on completing 25 years of service. Teacher education programs, however, are not as selective and may thus not be attracting the best talent pool. Working conditions of teachers are challenging, considering that multi-grade teaching is seen in many schools and on average student-teacher ratios are high.



3. Preparing Teachers with Useful Training and Experience

Even though minimum standards for joining the teaching profession are in line with better performing systems, the quality of education programs that award these standards needs to be strengthened. Practical professional experience is a compulsory part of the formal education required to become a teacher.



4. Matching Teachers' Skills with Students' Needs

Systems are in place to identify critical-shortage subjects, though information gathered is not used to address teacher shortages. Moreover, incentives need to be introduced for teachers to teach in hard-to-staff schools.



5. Leading Teachers with Strong Principals

Professional development and training opportunities are offered to principals/head teachers; however, those are not mandatory. Financial incentives for principals are somewhat based on performance at the school and individual level.



6. Monitoring Teaching and Learning

Monitoring of teachers has increased over the years, which has reduced teacher absenteeism; however, it has not been effective in improving student learning outcomes. Teachers are trained to assess student achievement, and systems are in place to assess student learning, but it does not appear that these systems are used to inform teaching lesson planning and instructional practices.



7. Supporting Teachers to Improve Instruction

Mandatory professional development days for teachers are limited, although increasing. Both external and internal evaluations are based on classroom observations; however, feedback processes to improve instructional practices need to be improved. Mentoring programs have also been introduced, and staff strengthening is needed to separate this function from evaluation.



8. Motivating Teachers to Perform

Promotion opportunities and salary increments are linked to years of service, academic qualifications, and vacancies at the top. Some limited financial incentives are awarded based on performance of the school and the teacher. A teacher can continue to be in government service if his or her conduct remains in line with policies; therefore, teacher performance is generally not a cause for dismissal.



Overview of SABER–Teachers

Interest is increasing across the globe over how to attract, retain, develop, and motivate great teachers. Student achievement has been found to correlate with economic and social progress (Hanushek and Wössmann 2007, 2009; Campante and Glaeser 2009; Pritchett and Viarengo 2009), and teachers are key. Recent studies have shown that teacher quality is the main school-based predictor of student achievement, and that several consecutive years of outstanding teaching can offset the learning deficits of disadvantaged students (Sanders and Rivers 1996; Park and Hannum 2001; Nye, Konstantopoulos, and Hedges 2004; Rockoff 2004; Rivkin et al. 2005; Hanushek and Rivkin 2010). However, achieving the right teacher policies to ensure that every classroom has a motivated, supported, and competent teacher remains a challenge. Evidence on the impacts of many teacher policies remains insufficient and scattered, and the impact of many reforms depends on specific design features. In addition, teacher policies can have very different impacts, depending on the context and other education policies in place.

A tool, SABER–Teachers, aims to help fill this gap by collecting, analyzing, synthesizing, and disseminating comprehensive information on teacher policies in primary- and secondary-education systems around the world. SABER–Teachers is a core component of SABER (Systems Approach for Better Education Results), an initiative launched by the Human Development Network of the World Bank. SABER collects information about different education systems' policies, analyzes it to identify common challenges and promising solutions, and makes the results widely available to help inform countries' decisions on where and how to invest to improve education quality.

SABER–Teachers collects data on 10 core teacher policy areas to offer a comprehensive, descriptive overview of the teacher policies that are in place in each participating education system (Box 1). Data are collected in each participating education system by a specialized consultant using a questionnaire that ensures comparability of information across different systems. Data collection focuses on the rules and regulations governing teacher-management systems. This information is compiled in a comparative database where interested stakeholders can access detailed information that describes how different education

systems manage their teacher force. The database also includes copies of supporting documents. It is available at the SABER–Teacher website (<http://saber.worldbank.org>).

Box 1. Teacher Policy Areas for Data Collection

1. Requirements to enter and remain in teaching
2. Initial teacher education
3. Recruitment and employment
4. Teachers' workload and autonomy
5. Professional development
6. Compensation (salary and nonsalary benefits)
7. Retirement rules and benefits
8. Monitoring and evaluation of teacher quality
9. Teacher representation and voice
10. School leadership

To offer informed policy guidance, SABER–Teachers analyzes the information collected to assess the extent to which the teacher policies of an education system are aligned with policies shown by research evidence to have a positive effect on student achievement. SABER–Teachers analyzes the teacher policy data collected to assess each education system's progress in achieving eight teacher policy goals: (1) setting clear expectations for teachers; (2) attracting the best into teaching; (3) preparing teachers with useful training and experience; (4) matching teachers' skills with students' needs; (5) leading teachers with strong principals; (6) monitoring teaching and learning; (7) supporting teachers to improve instruction; and (8) motivating teachers to perform (figure 1).

Figure 1. Eight Teacher Policy Goals



The eight teacher policy goals are functions that all high-performing education systems fulfill to a certain

extent to ensure that every classroom has a motivated, supported, and competent teacher. These goals were identified through a review of evidence in research studies on teacher policies, and through analysis of policies of top-performing and rapidly improving education systems. Three criteria were used to identify the teacher policy goals. Specifically, they had to be (1) linked to student performance through empirical evidence, (2) labeled a priority for resource allocation, and (3) actionable, that is, open to improvement through government actions. The eight teacher policy goals exclude other objectives that countries might want to pursue to increase the effectiveness of their teachers but have lacked, to date, sufficient empirical evidence for making specific policy recommendations.

By classifying countries according to their performance on each of the eight teacher policy goals, SABER–Teachers can help diagnose the key challenges that countries face in ensuring they have effective teachers. For each policy goal, the SABER–Teachers team identified policy levers (actions that governments can take to reach these goals) and indicators (measures of the extent to which governments are making effective use of these policy levers). Using these policy levers and indicators, SABER–Teachers classifies education systems’ performance on each of the eight teacher policy goals using a four-category scale (latent, emerging, established, and advanced). The ratings describe the extent to which a given education system has in place teacher policies that are known to be related to improved student outcomes (Appendix 1). The main objective of this assessment is to identify the strengths and weaknesses of the teacher policies of an education system and to pinpoint possible areas for improvement. For a more detailed report on the eight teacher policy goals, policy levers, and indicators, as well as the evidence base supporting them, see Vegas et al. (2012).

The main focus of SABER–Teachers is on policy design, rather than policy implementation. SABER–Teachers analyzes the teacher policies formally adopted by education systems. However, policies on the ground, that is, as they are actually implemented, may differ quite substantially from policies as originally designed. In fact, they often do differ, due to such factors as the political economy of the reform process, lack of capacity of organizations in charge to implement the policies, or the interaction between these policies and specific contextual factors. Since SABER–Teachers collects limited data on policy implementation, the assessment

of teacher policies presented in this report needs to be complemented with detailed information that describes the actual configuration of teacher policies on the ground.

This report presents results of the application of SABER–Teachers in Punjab, Pakistan. It describes Punjab’s performance for each of the eight teacher policy goals, alongside comparative information from education systems that have consistently scored high results in international student achievement tests and have participated in SABER–Teachers. Additional information on Punjab’s teacher policies and those of other countries can be found on the SABER–Teachers website.

Economic Context

Over the past four years, Pakistan has made significant headway in regaining macroeconomic stability in the country. After 2008, the growth of the country's gross domestic product (GDP) declined dramatically, falling from 5 percent to 0.4 percent. The last four years have seen a steady increase in the GDP growth rate, rising from 3.8 percent in 2012 to 5.3 percent in 2017. Although growth has been unsteady over the last two decades, it has been pro-poor. Poverty levels, based on the revised poverty line, reveal that head count poverty in Pakistan has decreased from 64.3 percent in 2002, to 29.5 percent in 2014, as a result of higher GDP growth rates.¹ Among the country's provinces, Punjab continues to take the lead as far as the economic indicators are concerned. The province contributes 60 percent to the national GDP. The literacy rate stood as highest at 62 percent for 2016. Growth in agricultural sector has been slow but steady. The services sector (61 percent) contributes the most to the provincial GDP followed by agriculture (24 percent) and industry (16 percent) (Pasha 2015).

Economic growth in the country has been stimulated by high levels of consumption, a rapid rise in the services sector, and an ambitious structural reforms program (World Bank 2017). Decreased energy prices were meant to stimulate domestic investment and local industry to increase production. The government also announced support packages for exports and agriculture. However, while productivity and exports have increased, the rising demand has also led to an increase in the country's imports of high-value-added goods. In addition, the textile and agricultural industry are largely dependent on crop yields, and therefore, seasonal fluctuations may hinder effective growth. The fiscal deficit, which had fallen to 4.5 percent in 2016, has also seen a dramatic rise over fiscal year 2016–2017 (Ministry of Finance 2017). The shortage of revenues required to reduce the deficit arises from a widening gap between exports and imports, reduced oil prices, and a 2.7 percent decline in remittances. A low tax-to-GDP ratio of 13:1 further highlights the need to broaden the tax base to generate revenues. Pakistan has also fallen prey to high levels of

income disparities between the urban and rural areas, as well as rates of unemployment as high as 5.9 percent (Ministry of Finance 2017).

Moving forward, the China-Pakistan Economic Corridor is expected to pave way for considerable investment in agriculture and help alleviate electricity shortages. However, the twin deficits on fiscal budget and on foreign currency, coupled with a decline in overall country's export level, have contributed to the deterioration of the macroeconomic stability indicators of the country. Given the tenuous nature of macroeconomic stability in Pakistan, there is a need to improve not only the productive capacity of the country, but also to cater to the development of human and social indicators for the sustainability of high growth levels.

Education Context

With the passage of the 18th Amendment to the constitution of Pakistan in 2010, there was a devolution of powers pertaining to the Education sector from the federal to the provincial level. The School Education Department, for each of the provinces, is responsible for designing and implementing all education policies for primary and secondary education in the respective province. The public sector formal education system comprises 13 academic years, starting from nursery to the higher secondary school level. Primary education consists of six years of schooling from nursery to grade 5; middle schools consist of three years of schooling, from class 6 to class 8; secondary education consists of two years of high school (classes 9 and 10) and higher secondary education (classes 11 and 12).

In 2010, the government of Pakistan introduced the Right to Education Act through Article 25A of the constitution, which declares the provision of free and compulsory education to children between the ages of 5 and 16 years to be the responsibility of the state. The National Education Policy of 2009 was formulated to widen the access to education and improve the quality of schooling being provided to children enrolled in school. However,

¹ Although head count poverty has declined in Pakistan, correlates of poverty such as malnutrition and stunting are high, while child and maternal health indicators remain consistently low.

with the decentralization of the Education sector, the statutory platform for coordination among the provinces dissolved. Instead, the Ministry of Education, Training and Standards in Higher Education (MET&SHE) and the National Curriculum Council was established in 2010 to maintain a standard of education in the country. The government of Pakistan formulated the National Plan of Action for Accelerating Education-Related MDGs (2013–2016) with the aim to “accelerate progress” toward increasing enrollment levels and school retention rates (UNESCO 2015).

In 2011 the government of Punjab announced the Punjab Schools Reform Roadmap, aimed at achieving universal primary education and ensuring the provision of quality education to all children of school-going age. The Punjab School Education Sector Plan (2012–2017) was also developed to strategize and implement reforms for increasing enrollment, reducing gender differentials in enrollment, and developing policies to include disabled and disadvantaged children in the mainstream system of education. In addition, the School Education Department for each province was tasked with formulating and implementing policies for recruitment of teachers and outlining the requirements for remaining in the teaching profession. The National Professional Standards for Teachers were developed in 2009 with the help of UNESCO and USAID. These standards outline the role and responsibilities of teachers with regard to their working conditions. Organizations such as the Quaid-e-Azam Academy for Educational Development (QAED, former DSD) in Punjab and the Provincial Institute for Teacher Education in Sindh were charged with the training and development of public school teachers to promote quality education. In 2012, the DSD (now QAED), in conjunction with the School Education Department, participated in Continuous Professional Development Programs, which are mandatory for all primary school teachers to improve content knowledge and pedagogical skills to stimulate student learning. The DSD (now QAED) also provided support for revision of the national education curriculum and textbook review processes. As noted, the Punjab government has recently reformed the

DSD into the Quaid-e-Azam Academy for Educational Development (QAED). This change aimed to develop the department into an authority on teacher development, independent of the School Education Department. While most of the functions of QAED remain the same as before, its domain has expanded to providing more intensive pre- and in-service training to teachers of all cadres.

As of 2016, 150,408 government schools provide primary and secondary education to more than 17 million children across the country (Pakistan Education Statistics 2015–2016). Nearly one-third of the country’s public schools are situated in Punjab, serving 8.6 million children. These enrollment statistics may have increased owing to the Punjab government’s efforts to achieve Universal Primary Education and decrease student dropout rates. Despite increased access to schools, reforms to the curriculum, and investment in teacher training, student learning levels remain low across the country (ASER Pakistan 2015). Student assessments paint a troubling picture of the quality of education being provided. Assessments of class 5 students across the country indicated that only 52 percent of the children could read stories in their native language, while 48 percent could solve two-digit division. In comparison, assessment scores from Punjab are slightly more uplifting, with 65 percent of the class 5 students being able to read stories in their native language, and 59 percent being able to perform two-digit division (ASER Pakistan 2016). It is believed that low student performance is directly linked to the shortage of well-trained teachers, lack of motivation and incentives for teachers to perform, non-availability of learning materials, and absence of facilities such as electricity, clean drinking water, and functioning toilets in schools.

Over the past decade, public spending on education has increased in Pakistan. Nevertheless, the percentage of GDP allocated toward education remains one of the lowest in South Asia at 2.3 percent (Ministry of Finance 2017).² Individually, provincial governments have shown an inclination toward increasing the budget allocated to

² According to statistics provided by the World Bank, in 2015, Pakistan allocated 2.3 percent of its GDP to education, while other countries allocated a larger proportion (Afghanistan, 3.3

percent; Nepal, 3.7 percent; Bhutan, 7.4 percent; and Maldives, 5.4 percent).

education. In Punjab alone, there has been a 12 percent increase in the total budget allocated for education (I-SAPS 2015). Nearly 90 percent of the province's education budget has been absorbed into salaries of teachers, while the remaining amount has been allocated to teacher training, increasing student enrollments in schools, and improving the overall facilities available at schools in the province (I-SAPS 2015). However, with the national focus on interest payments, defense spending, and the need to meet the country's energy requirements, social and human development are not given the attention required.

Goal 1: Setting clear expectations for teachers

Established ●●●○

Setting clear expectations for student and teacher performance is important to guide teachers' daily work and align necessary resources to make sure that teachers can constantly improve instructional practice. In addition, clear expectations can help ensure coherence among different key aspects of the teaching profession, such as initial teacher education, professional development, and teacher appraisal.

SABER–Teachers considers two policy levers that school systems can use to reach this goal: (1) clear expectations for what students should know and be able to do and how teachers can help students reach these goals and (2) useful guidance on how teachers can use their time to improve instruction at the school level.

(1) In Punjab, there are expectations for what students are expected to learn and for what teachers are supposed to do. The National Curriculum, 2006, puts forward the skills and competencies that students are expected to learn at each grade level and for each subject. The Punjab Curriculum Authority is an autonomous body within the School Education Department and is responsible for reviewing the curriculum and standards of education. It also verifies the alignment of textbooks with curriculum standards. Another autonomous body within School Education Department, the Punjab Examination Commission, develops and implements examinations.

The tasks that teachers are expected to carry out are officially stipulated in the National Professional Standards for Teachers (NPSTs), which were developed by the Policy and Planning Wing of the Ministry of

Education in February 2009. The NPSTs comprise 10 standards:

1. Subject Matter Knowledge
2. Human Growth and Development
3. Knowledge of Islamic Ethical Values/Social Life Skills
4. Instructional Planning and Strategies
5. Assessment
6. Learning Environment
7. Effective Communication and Proficient Use of Information Communication Technologies
8. Collaboration and Partnerships
9. Continuous Professional Development and Code of Conduct
10. Teaching of English as a Second/Foreign Language

These standards cover essential knowledge, skills, and dispositions that teachers are expected to acquire and adhere to in the classroom and school. In-service teacher training and professional development programs are developed in the light of the NPSTs

Regulations also require teachers to carry out tasks directly related to classroom teaching such as grading of assessments and standing in for absent teachers when required and to adapt their instructional strategies based on students' needs and development.

(2) There is no guidance on use of teachers' working time toward nonteaching tasks related to instructional improvement that occur outside the classroom. In Punjab, more than 90 percent of time is spent on teaching a total of 39 hours each week (225 days per year). Even though teachers are expected to participate in administrative or management tasks and take part in internal evaluation activities of the school, no guidelines stipulate the proportion of working time to be spent on these activities. Mentoring has been introduced in schools but is still not laid out as an official teacher duty.

The statutory definition of working time for primary school teachers in Punjab includes total number of hours spent at school. Global experience also suggests that a definition of working time as the total number of hours at school may be more conducive to learning, because it recognizes that teachers normally need to devote some time to nonteaching tasks, such as lesson planning, grading of students' work, learning support, and professional development, as well as administrative and educational tasks outside the classroom, such as

collaborating on school plans and participating in school evaluations.

Top performing systems also reveal that many tasks outside the classroom improve teacher effectiveness inside the classroom. In Punjab, however, teachers in their capacity as public officials are engaged in tasks that are unrelated to the teaching profession. For instance, they participate in carrying out activities during country-wide elections, vaccination campaigns, censuses, and information collection for the Universal Primary Education Program. The government has leeway in pulling teachers into tasks outside school time and unrelated to the teaching profession and can also set up monitoring mechanisms to ensure the time spent in instructional and noninstructional activities contributes to teachers’ professional development.

Successful education systems, such as those in Ontario (Canada), Finland, Japan, the Republic of Korea, and Singapore, devote considerable time at the school level to activities that are related to instructional improvement (Figure 2). These include collaboration among teachers on the analysis of instructional practice, mentoring, and professional development (Levin 2008; Darling and Hammond 2010; Darling, Hammond, and Rothman 2011). In addition to the actual contact time with students, these systems make sure that teachers can spend work time on collaboration, on-site professional development, and research on the effectiveness of various teaching strategies. Japan, for example, devotes about 40 percent of teachers’ working time to these types of activities, while Ontario currently devotes 30 percent (Darling, Hammond, and Rothman 2011).

Figure 2. Teachers’ Official Tasks Related to School Improvement

	Punjab	Morocco	Tunisia	Turkey	Singapore
Mentor peers		✓	✓	✓	✓
Collaborate on school plan			✓	✓	✓
Design the curriculum			✓		✓
Participate in school evaluation	✓		✓		✓

Source: SABER–Teachers data.

Goal 2: Attracting the best into teaching

Established ●●●○

The structure and characteristics of a career in teaching can help determine whether talented individuals opt to become teachers. Talented people may be more inclined to take such a career path if entry requirements are on par with those of well-regarded professions, compensation and working conditions are adequate, and attractive career opportunities are in place for them to develop as professionals.

SABER–Teachers considers four policy levers that school systems can use to reach this goal: (1) requirements to enter the teaching profession, (2) competitive pay, (3) appealing working conditions, and (4) attractive career opportunities.

(1) In Punjab, the requirements to enter the teaching profession are aligned with better performing systems for both primary and secondary school teachers.

In Punjab, the Higher Education Commission (HEC), a federal institution, sets the regulations that apply to initial teacher education programs. The requirements to be able to enter the teaching profession have been upgraded significantly over the past few years. These include a change in minimum professional qualifications for teachers from the Primary Teaching Certificate to Bachelors in Education and an increase in weightage of the Teacher Entry Test and decrease in weightage of academic qualification. Given that these changes are fairly recent, a large number of teachers in the system do not meet minimum qualification requirements.

Even with improvement in minimum education requirements, education programs do not attract the best of the talent pool, as they are offered in multiple private and government universities and therefore are not as selective. While HEC has set guidelines for the standardization of the Bachelor’s and Master’s degrees in education programs, most are of poor quality. Thus, till the quality of these teacher education programs improves, increasing the educational requirements may not have any impact on quality of talent pool attracted in the profession.

Applicants with a minimum level of academic qualification have to pass a written test (this is conducted in English, with an exception for Urdu and Arabic

positions) and an interview-stage assessment. The District Recruitment and Selection Committee interviews the candidates who achieve qualifying marks in the test. Selected candidates are required to participate in a training conducted by the Directorate of Staff Development in Lahore. The initial seniority of the candidates is determined through the “merit marks” obtained during the selection process and their performance during the training period. Merit marks are computed based on performance of the candidate in exams taken during their academic career. These include Secondary School Certificate, Intermediate, Bachelor’s, and Graduate degrees.

Many high-performing education systems offer two types of teaching training tracks: consecutive programs and concurrent programs. In Punjab, training is conducted through both concurrent and consecutive programs. Concurrent programs teach subject knowledge and pedagogic skills simultaneously. Consecutive programs include a first phase of one or several years of knowledge acquisition in a particular subject, followed by a phase of professional skills and knowledge acquisition, before receiving the Certificate in Pedagogical Competencies. In addition, HEC sets requirements for the time that should be allocated by education institutions in preparing teachers in different skills. The recommended allocation includes 25 percent of total hours of initial teacher education to pedagogy, 42 percent to teaching methods, 9 percent to language, 4 percent to science and math, and the remaining 20 percent to other areas.

(2) Teacher pay is attractive compared with that of other public officials. In Punjab, starting pay for teachers is more than 80 percent of the GDP per capita. There is also a performance incentive for teachers in Punjab. Teachers working in schools that fall within the top 20 percent of top-performing schools are awarded monetary incentives based on performance assessment. Teachers also receive health benefits, and more importantly, on completing 25 years of service, teachers become eligible for retirement benefits, which include both defined contribution and defined benefit plans. The defined benefit plan by its structure ensures a steady stream of income for teachers over the course of their retirement.

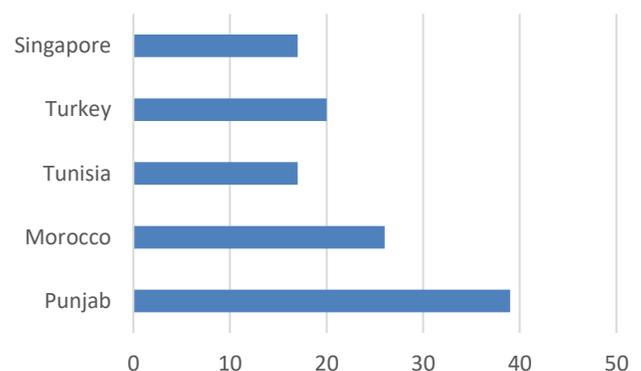
(3) Working conditions can be improved further to attract talented individuals to the teaching profession.

Working conditions may play an important role in the decision to become a teacher. Talented candidates who have opportunities in other professions may be discouraged from becoming teachers if working conditions are poor.

Teachers in Punjab have a high workload because of multi-grade teaching in several schools and, on average, high student-teacher ratios. For Punjab, the primary school student-teacher ratio is 39:1 and the secondary school student-teacher ratio is 31:1, which is higher compared to better performing systems (Figure 3).

In Punjab, the District Education Authority and School Education Department are responsible for setting and monitoring infrastructure, hygiene, and sanitation standards. About 87 percent of public schools comply with the basic infrastructure and hygiene and sanitation standards set in law or regulation.

Figure 3. Student-Teacher Ratio, Primary School



Source: SABER–Teachers data and UNESCO statistics.

(4) Opportunities for career advancement are based on seniority, academic qualifications, and vacancies at the top. Teachers in most education systems have opportunities to seek promotion to principal positions at some point in their careers. In addition to these “vertical” promotion opportunities, most high-performing education systems offer teachers the possibility of “horizontal” promotions to academic-leadership positions. Taking an academic job allows teachers to grow professionally and yet remain closely connected to instruction, without taking a managerial position (Darling-Hammond 2010; OECD 2012).

Like other government servant positions, opportunities for advancement in teaching are based on seniority, academic qualifications, and vacancies rather than performance level. While this acts as a deterrent for

more ambitious individuals to join the profession, it ensures continuity of tenure and income for those looking for stability. Teachers also have the option of applying for a school's administrative (such as that of school principal) and academic positions. To encourage in-service teachers to apply for administrative and academic positions, the total period of prior service is deducted from their age if there is an upper age limit for the post.

For advancement to positions such as a principal/head teacher, the teacher with the highest qualifications assumes that role in a primary school. Previously, the teacher with the most experience assumed the role of a head teacher. In middle and high schools, head teachers or principals are appointed either through direct recruitment or via promotion.

Goal 3: Preparing teachers with useful training and experience

Advanced ●●●●

Equipping teachers with the skills they need to succeed in the classroom is crucial. Teachers need subject matter and pedagogic knowledge, as well as classroom-management skills and lots of teaching practice to be successful in the classroom. In addition, preparation helps put all teachers on an equal footing, giving them a common framework to improve their practice.

SABER–Teachers considers two policy levers that school systems can use to reach this goal: (1) minimum standards for preservice training programs and (2) required classroom experience for all teachers.

(1) There are minimum standards to enter preservice teacher training programs in Punjab. Virtually all high-performing countries require that teachers have an educational level equivalent to a Bachelor's degree ISCED³ 5A, and some, such as Finland, also require a research-based master's degree (OECD 2012).

In Punjab, the minimum level of education required is in line with high-performing countries. At the primary

school level, the minimum requirement is ISCED 5A and above ISCED 5A for secondary schools. According to the National Education Policy, 2009, teacher candidates must have a four-year Bachelor's degree in education (B.Ed. Honors) to teach at the primary level, and a Master's level degree to teach secondary and higher secondary education. The Bachelor's degree in education may be pursued after completing the Higher Secondary School Certificate (Intermediate) or on completion of four semesters in a Bachelor of Sciences program. Primary Teaching Certificates and the Certificate in Teaching have been phased out to encourage current teachers to improve their qualifications; however, exceptions may exist for less developed areas where teachers with relevant qualifications may not be available.

Even though minimum standards for joining the teaching profession are in line with better performing systems, the quality of programs that award these standards needs to be strengthened.

(2) Practical classroom experience is required for all teachers in Punjab. Practical experience is an important factor in determining teaching quality. The more teachers test their pedagogical theories, subject-matter knowledge, and classroom-management skills, the better prepared they will be for their job. Most high-performing systems require their teacher entrants to have a considerable amount of classroom experience before becoming independent teachers (figure 4), and some of these systems provide mentoring and support during the first and even second year on the job (Ingersoll 2007; Darling-Hammond 2010). In Punjab, the second and fourth year of the Bachelor's degree in education (B.Ed. Honors program—elementary and secondary) consists of teaching practice courses and supervised school experience/observation/visits courses, during which teachers acquire practical classroom experience. For primary teachers, the minimum classroom experience requirement is more than two years and that of secondary teachers is about one or two years. This practical work is supervised through observations and visits. Most high-performing education systems require that incoming teachers have at least a minimum amount

³ International Standard Classification of Education, 2011 version.

of practical professional experience or that they pass an examination, in addition to their teacher-training program. On obtaining professional qualification, teacher candidates are required to pass a written exam held under the National Testing Service; 50 percent achievement in the test is required to join the teaching profession.

Additionally, subject-specific, in-service teachers' training is provided for professional development of teachers and educational managers. These two-to-four-week programs are in various subjects (English, Urdu, Islamiat, mathematics, science, social studies, and general knowledge).

Even though in terms of structure the education training programs are in line with better performing systems, nevertheless student-learning outcomes are weak. The QAED is currently reforming its teacher-training programs. The aim is to provide newly recruited teachers more time inside the classroom, in addition to their experience during their B.Ed. and M.Ed., such that they can be trained, guided, and mentored by experienced teachers on optimal classroom practices and pedagogy.

Figure 4. Required Classroom Experience, Primary School Teachers

	Punjab	Morocco	Tunisia	Turkey	Singapore
3 months or less					
12 months or less			✓	✓	
12–24 months		✓			✓
More than 24 months	✓				

Source: SABER–Teachers data.

Goal 4: Matching teachers' skills with students' needs

Latent ●○○○

Avoiding teacher shortages in any given grade, education level, or subject, and ensuring that teachers work in schools where their skills are most needed, is important for equity and efficiency. Furthermore, it can help ensure that all students in a school system have an equal

opportunity to learn. Without purposeful allocation systems, it is likely that teachers will gravitate toward schools that serve better-off students or that are in more desirable areas, deepening inequalities in the system. SABER–Teachers considers two policy levers that school systems can use to reach this goal: (1) incentives for teachers to work in hard-to-staff schools and (2) incentives for teachers to work in critical-shortage areas.

(1) No mechanisms are in place to address teacher shortages in hard-to-staff schools. Many countries face challenges in attracting effective teachers to work in hard-to-staff schools, such as those in disadvantaged locations or those that serve underprivileged populations. As a result, they often must put in place a specific set of incentives, such as monetary bonuses or opportunities for promotion, to attract teachers. In Punjab, no incentives exist for teachers to apply to work in hard-to-staff schools. Figure 5 highlights examples of incentives that can be offered. This results in geographic location-based inequities, considering that minimum qualification requirements for teachers are also lower in such areas.

(2) Punjab has identified critical-shortage subject areas, but policies do not systematically address such areas. Critical-shortage subjects, where there is a shortage of teachers to meet student needs, are present in many education systems. Many systems develop policies and offer incentives aimed at encouraging teachers to teach these subjects. Incentives can include monetary bonuses and subsidized education or scholarships in those subject areas. In Punjab, English, Arabic, mathematics, science, fine arts, and home economics have been identified as critical-shortage subjects. However, there are no existing incentives to motivate qualified candidates to teach those subjects.

Figure 5. Incentives for Teachers to Teach in Hard-to-Staff Schools

	Punjab	Morocco	Tunisia	Turkey
Promotion				✓
Higher basic salary in hard-to-staff schools				
Monetary bonus			✓	
Subsidized education				
Housing support				

Source: SABER–Teachers data.

Goal 5: Leading teachers with strong principals

Latent ●○○○

The quality of school heads is an important predictor of student learning. Capable principals can act as instructional leaders, providing direction and support for improving instructional practice at the school level. In addition, capable principals can help attract and retain competent teachers.

SABER–Teachers considers two policy levers that school systems can use to reach this goal: (1) education-system investment in developing qualified school leaders and (2) decision-making authority for school principals to support and improve instructional practice.

(1) In Punjab, principals are provided with professional development opportunities. Principals in secondary schools and head teachers in primary schools are chosen among the teachers based on seniority and experience, although no minimum professional administrative and teaching experience threshold is specified. Research from high-performing education systems suggests principals can develop leadership skills through supported work experience or specific training courses (Figure 6). High-performing systems, such as those in Japan, Korea, Shanghai (China), and Singapore, require applicants to principal positions to participate in specific coursework or a specialized internship or mentoring program aimed at developing essential leadership skills (Darling-Hammond 2010; OECD 2012).

In Punjab, principals/head teachers are offered training opportunities, but those are not mandatory. In addition to a one-year diploma in educational leadership and management studies offered by the University of Education, Lahore, QAED offers a three-day training for head teachers and master trainers on leadership.

In addition to salary, principals are offered monetary incentives; these are linked to overall performance of the school and based on their own performance. The incentives are awarded only to those principals who work in schools that are among the top 20 percent best-performing schools.

(2) Principals in Punjab are required to provide guidance for curriculum and teacher-related tasks. Moreover, they are explicitly required to evaluate teachers’ performance. Principals should be able to structure their time to focus on improving instruction in their schools (OECD 2012; Barber and Mourshed 2007). High-performing education systems, such as those in Finland, Ontario, and Singapore, think of their principals as instructional leaders. Principals are expected to be knowledgeable in teaching and curriculum matters, as well as to provide guidance and support to teachers. They evaluate teachers, provide feedback, assess the school’s needs for professional development, and direct instructional resources where they are most needed (Darling-Hammond and Rothman 2011).

In Punjab, principals are expected to support and improve instructional practice. Principals are responsible for preparing school syllabi, scheme of studies, timetables, school council schedules, parent teacher and staff meetings, and activities scheduled in advance. Additionally, principals are responsible for ensuring that classes are held and pupils’ work is checked and marked. They also examine teachers’ lessons plans, analyze examination results, review the school’s performance, and prepare the annual report. Concerning the evaluation of teachers, principals ensure the presence and punctuality of both students and teachers and conduct an appraisal of all staff members, including observation, discussions, and written reports.

The government of Punjab has taken steps in recent years to increase monitoring of schools to counter absenteeism. However, the balance between accountability and autonomy has yet to be achieved. Steps have been taken to provide greater autonomy to schools, including disbursement of the non-salary budget

to schools. With this, head teachers now have a greater role in formulating and managing school development plans in conjunction with the school councils. In addition, head teachers also have the authority (with the consent of the school council) to hire “part-time coaches” using the non-salary budget in cases of a teacher shortage in the school.

Figure 6. Mechanisms to Support the Development of Principals’ Leadership Skills

	Punjab	Morocco	Tunisia	Turkey	Singapore
Courses or other training requirements	✓	✓	✓	✓	✓
Mentoring or internship program	✓	✓			✓

Source: SABER–Teachers data.

Goal 6: Monitoring teaching and learning

Established ●●●○

Assessing how well teachers are teaching and whether students are learning is essential for devising strategies for improving teaching and learning. First, identifying low-performing teachers and students is critical if education systems are to provide struggling classrooms with adequate support to improve. Second, teacher and student evaluations can also help identify good practices, which can be shared across the system to improve school performance.

SABER–Teachers considers three policy levers that school systems can use to reach this goal: (1) availability of data on student achievement to inform teaching and policy, (2) adequate systems to monitor teacher performance, and (3) multiple mechanisms to evaluate teacher performance.

(1) In Punjab, some system-level mechanisms are in place to ensure that teachers develop skills and expertise in classroom assessment. All high-performing education systems ensure that enough student data are available to inform teaching and policy, but they do so in very different ways. Regardless of the mechanism they decide to follow, high-performing countries ensure that three main functions are fulfilled: (1) a system collects relevant and complete data on student achievement regularly, (2) a mechanism allows public authorities

access to these data so they can use the information to inform policy, and (3) a mechanism feeds these data and relevant analyses back to the school level, so teachers can use them to inform the improvement of instructional practice.

In Punjab, teachers are required to complete coursework or training on student assessment methods to evaluate student achievement. In fact, teacher induction training is mandatory for every newly appointed teacher to inform educators on methods of student assessment. Additionally, national large-scale examinations are used to monitor education quality levels; the student achievement data collected are available for policy makers.

At the province level, exams are conducted across schools in grades 5, 8, 9, and 10. Student assessment findings are disseminated to provide guidance and support to teachers and schools. Educators have access to the results of the tests that are conducted by Assistant Education Officer (AEO) and the Monitoring and Evaluation Assistant every month in primary schools. Furthermore, professional development training sessions may sometimes be designed in a specific manner to ensure that the feedback from the student assessments is incorporated in teacher trainings. Nonetheless, student assessments are not used to inform teaching lesson plans and institutional practice, as there are no courses or workshops on it.

(2) A system is in place to evaluate teacher performance. In Punjab, teachers are evaluated at the subnational (Punjab Monitoring and Implementation unit) and local levels (AEO). The Head Teacher conducts the internal evaluation, and the AEO conducts external evaluation. The internal evaluation can be done on a daily, weekly, fortnightly, or monthly basis. The external evaluation is done monthly, which is considered a very high frequency. Moreover, it has not been as effective in improving quality of teaching.

The system of monitoring schools and teachers has become computerized with the introduction of tablets that contain forms that are filled in by Monitoring and Evaluation Assistants, and the database is updated in “real time” at the Punjab Monitoring and Implementation unit. In addition, the AEO network allows the schools to receive feedback regarding student scores, as well as school and teacher rankings. Due to this system, tracking teachers over time is possible in Punjab.

Each school has a unique identification code, and teachers’ progress can therefore be monitored through the school code and his or her name at a subnational level.

With introduction of system of monitoring, the optimal tradeoff between monitoring and teacher autonomy is yet to be achieved. Moreover, it has resulted in nonproductive practices. With an increase in monitoring, teachers spend a considerable amount of time responding to the requirements of the School Education Department; the teachers complete the additional paperwork during school working hours. Higher-level monitoring practices also need to be balanced off against support from training and professional development opportunities to teachers. There is also room for improving the monitoring processes by AEOs, as these officials have a high workload, and not all data are collected equally well. According to a report, excessive pressure in the system in the past resulted in pressure to fudge numbers, which showed up most clearly in the government’s monthly monitoring of student learning outcomes (Naviwala 2016).

(3) Multiple mechanisms exist to evaluate teacher performance (figure 7). Most high-performing systems conduct teacher evaluations using multiple mechanisms for data collection and varied criteria for assessment, including class observations. In Punjab, classroom observations are conducted by the head teacher and the AEO as part of the teacher assessment system. Professional communities, such as principals or colleagues, are involved in these assessments. Furthermore, a variety of criteria are employed to assess educator performance; among them are subject matter knowledge, teaching methods, student assessment methods, and students’ academic achievement.

Many top-performing education systems define explicit criteria for assessing teacher performance. Figure 7 highlights some of these.

Figure 7. Criteria to Evaluate Teacher Performance

	Punjab	Morocco	Tunisia	Turkey	Singapore
Subject matter knowledge	✓	✓	✓	✓	✓
Teaching methods	✓	✓	✓	✓	✓
Student assessment methods	✓	✓	✓	✓	✓
Students’ academic achievement	✓			✓	

Source: SABER–Teachers data.

Goal 7: Supporting teachers to improve instruction

Latent ●○○○

Support systems are necessary to help improve instruction at the school level. To constantly improve instructional practice, teachers and schools need to be able to analyze specific challenges they face in classroom teaching, have access to information on best practices to address these challenges, and receive specific external support tailored to their needs.

SABER–Teachers considers three policy levers that school systems can use to reach this goal: (1) availability of opportunities for teacher professional development, (2) teacher professional-development activities that are collaborative and focused on instructional improvement, and (3) the assignment of teacher professional development based on perceived needs.

(1) Teachers in Punjab are required to participate in professional development activities. In many countries, participating in professional development is a requisite for teachers to stay in the profession as well as to qualify for promotions. In addition, to advance up the career ladder, teachers in most high-performing countries are required to have participated in a number of professional-development seminars or workshops according to their rank. In Punjab, primary teachers are required to attend a mandatory Professional Development day every three months. This amounts to four days a year. Secondary teachers are required to

engage in professional development as well, though a minimum number of days is not specified. The cost of professional development programs is borne by the government, and teachers do not incur any expenses.

(2) Teacher professional development in Punjab includes activities that have been found by research to be associated with instructional improvement, such as participation school networks (figure 8). Research suggests that effective teacher professional development is collaborative and provides opportunities for the in-school analysis of instructional practice. As mentioned earlier, high-performing education systems, such as in Japan and Ontario, devote as much as 30 percent of school time to professional development and instructional-improvement activities. Such activities include observation visits to other schools, individual or collaborative research, and participation in teacher or school networks.

In Punjab, a continuous professional development framework was introduced in 2008 for professional development of teachers. The framework is school-specific and provides training to schools in clusters (cluster radius is 16 km). An AEO and a cluster teacher are responsible for training teachers of several schools in a cluster, which provides a chance for teachers to hear about the experiences of teachers from other schools and allows sharing of best practices. Professional development programs are geared toward primary school teachers. The CPD framework also includes a component on mentoring. Both primary and secondary school teachers are expected to be mentored for a month when they start teaching. The government is taking steps to recruit more AEOs and more cluster experts in the hope that this will increase the quality of monitoring and professional development at the same time.

(3) Teacher professional development is not formally assigned based on teachers’ individual needs. Assigning professional development to teachers based on performance evaluations is one way of potentially improving instructional practice. Teacher professional development can be targeted to meet the needs of specific teachers. However, in Punjab professional development is not assigned on a perceived-needs basis, nor are teacher evaluations utilized to assign a supervisor. Therefore, in-service training programs are not sufficiently differentiated and appropriate for their professional needs. The design of such programs also

does not take into account the local analysis of schools’ and teachers’ needs, as well as student achievement and observations made during inspection visits.

Figure 8. Formally Recognized Types of Professional Development

	Punjab	Morocco	Tunisia	Turkey	Singapore
Observation visits			✓	✓	✓
Teacher networks		✓	✓	✓	✓
School networks	✓	✓	✓		✓
Research			✓	✓	✓
Mentoring/coaching		✓	✓	✓	✓

Source: SABER–Teachers data.

Goal 8: Motivating teachers to perform

Established ●●●○

Adequate mechanisms to motivate teachers are a way for school systems to signal their seriousness in achieving education goals, to make the teaching career attractive to competent individuals, and to reward good performance while ensuring accountability.

SABER–Teachers considers three policy levers that school systems can use to reach this goal: (1) linking career opportunities to teacher performance, (2) establishing mechanisms to hold teachers accountable, and (3) tying teacher compensation to performance.

(1) In Punjab, career opportunities are linked to teachers’ years of experience, academic qualifications, and vacancies. In Punjab, a public school teacher goes through a three-year probation period to acquire an open-ended appointment. This probation period is mandatory. According to policy, criteria for granting an open-ended contract include years of teaching experience, employment status, educational qualifications, and performance on the job. At the implementation level, promotions depend on factors other than performance.

(2) Mechanisms are in place to hold teachers accountable. Requiring teachers to meet high professional criteria to comply with national quality standards in the teaching profession can facilitate instructional improvement. In Punjab, for teachers to remain in the profession, at the primary level, they go through quarterly CPD programs. Nevertheless, there is much discussion on whether these CPD programs are being effectively used to hold teachers to account.

Both primary and secondary teachers have to get a satisfactory rating in the Performance Evaluation Report (PER) on an annual basis. However, PERs are not designed to give teachers feedback on improving instructional practices. It is a general evaluation is used for public civil servants and includes criteria such as behavior toward the public and knowledge of laws and rules. In the case of an unsatisfactory rating, a show cause notice is issued to the teacher, who has to give an explanation for the low rating. There is an impression among policy-makers, however, that low scores are relatively rare.

Continuous monitoring of teachers results in a stringent check on teacher absenteeism. If a teacher is absent for an extended period of time, without notice or permission from the District education authority, a show cause notice is issued to the teacher, following which their salary is withheld. The teacher is then required to appear before the authority and explain his or her absence. In practice, teachers are dismissed only in severe absenteeism cases where there is failure to provide an explanation to the School Education Department. Similarly, dismissal of teachers occurs in very few, severe cases of poor performance. Teachers are generally transferred on the request of the Head Teacher if they are performing poorly and not achieving the desired results. Cases of misconduct and child abuse are dealt with if they are reported. Officially, poor performance could be considered a cause for dismissal. At the implementation level, however, to remain in the government service, the teacher just must depict good conduct. As the performance of teacher does not usually factor in, many teachers remain in government service despite inadequate performance.

(3) Teacher compensation is linked to performance of the school as a whole. Under the scheme called the High Achievers Program, teachers of schools that are among the top 20 percent get financial rewards. The

performance ranking of the school is derived from students achievement on exams, exam participation rates, and gain in school enrollment. Additionally, there are also financial rewards based on student attendance, contribution toward cocurricular activities, and participation in additional duties other than teaching (figure 9).

Figure 9. Incentives for High Performance

	Punjab	Morocco	Tunisia	Turkey	Singapore
Individual monetary bonus	✓		✓	✓	
School-level bonus	✓				

Source: SABER–Teachers data.

Policy and Implementation Options

This SABER country report has offered a snapshot of Punjab's key teacher policies and how they compare with those of top global performers in education. This section provides recommendations for further improvement of the policies for teachers in Punjab.

Goal 1: Setting clear expectations for teachers

In Punjab, clear expectations exist for what students should learn and what teachers are supposed to do. However, there is no guidance on use of teachers' working time for participating in nonteaching tasks related to instructional improvement. Some policy recommendations to improve on this policy goal include:

- Introduce a policy that puts forward efficient allocation of teachers' working time to relevant nonteaching activities (which may include mentoring other teachers, curriculum adaptation to student needs, and planning for school improvement). These allocations and nature of tasks could vary with years of experience of the teacher and would not mean a reduction in contact hours between teachers and students. Development of this policy should take input of teachers and principals because it has implications for their workload. Their ownership in the process may ease policy implementation process.
- Encourage involvement in noninstructional activities, provide training to teachers for becoming mentors, taking part in school planning activities, and curriculum building. Also, introduce nonmonetary incentives for teachers to participate in noninstructional activities. These could be monthly teacher awards or organizing a school party in honor of the teacher who actively participates in nonteaching tasks. With it, also hold teachers accountable by linking involvement in these activities to performance evaluation and career advancement opportunities.

Goal 2: Attracting the best into teaching

Teachers are offered competitive pay and accrue retirement benefits on completing 25 years of service. Teacher education programs, however, are not as selective and, thus, not attracting the best talent pool. Working conditions of teachers are challenging,

considering that multi-grade teaching is seen in many schools and on average student teacher ratios are high.

- Boost the prestige of teaching profession, specifically for public schools, to attract a larger pool of qualified applicants to apply to become teachers. A national communication strategy, such as a high-profile teaching award or a teaching channel, could be launched to communicate the success of high-performing teachers to the wider public and motivate teachers within the system to perform better.
- Facilitate expansion. Teach For Pakistan is known to attract qualified undergraduates and professionals to the teaching profession. In the United States, Teach For America is the biggest supplier of STEM teachers. Such programs have been funded by both the public and the private sectors to meet the shortage of qualified individuals to join the teaching profession, particularly in critical shortage subjects and hard-to-staff areas (Reference to Goal 4).
- Raise quality standards for teacher education programs, especially the process and criteria for admission into those programs to attract a better-qualified talent pool. With higher selectivity, potential applicants may also see greater prestige in joining those programs.
- Analyze school/classwise student-teacher ratios to find ways to rationalize those in schools that have high student-teacher ratios. Provide additional support to teachers teaching multi-grade classrooms, in the form of training or teaching assistants. Such measures act as incentives for new teachers so that professional responsibilities do not appear overwhelming and deter prospective candidates from joining the profession.
- Given the school infrastructure is regularly monitored in Punjab, there is potential to improve the compliance percentage further from 87 percent. Better working conditions facilitate attracting new teachers into the profession.
- Offer incentives such as scholarships to top-performing graduates to enter teacher education programs after Higher Secondary School Certificate and to stay in the profession.

Goal 3: Preparing teachers with useful training and experience

Even though minimum standards for joining the teaching profession are in line with better-performing systems, the quality of education programs that award these standards needs to be strengthened. Practical professional experience is a compulsory part of the formal education required to become a teacher.

The quality of teacher education programs also needs to be strengthened in terms of the classroom training and education provided to teachers. Affiliation with internationally recognized teacher education programs could provide an opportunity for a systematic overhaul of these institutions in the public domain.

Goal 4: Matching teachers' skills with students' needs

Systems are in place to identify critical-shortage subjects, though information gathered is not used to address teacher shortages. Moreover, incentives need to be introduced for teachers to teach in hard-to-staff schools.

- Provide significant incentives to teachers to work in hard-to-staff schools, such as higher salaries, scholarships for education, promotions, and housing support. For instance, in Shanghai, teachers who choose to work at rural schools can receive priority in admission to graduate schools and accreditation of higher teacher ranks, one-time monetary stipends, and compensation.
- Often, teachers placed in hard-to-staff areas deal with student absenteeism, which could be due to health issues or insufficient care at home. To address these issues, grassroots-level organizations need to be identified that can provide support to students and families in alleviating these issues. By building partnerships with these organizations at the school level, teachers get additional support in such schools and do not have to deal with issues unrelated to the classroom during instructional time. This may lead to improvement in working conditions and development of support system for hard-to-staff schools.
- Train teachers in developing students' socioemotional skills. In hard-to-staff schools, students are faced with additional challenges

that diminish the effectiveness of conventional teaching practices. To address this, teachers need to be sensitive to their pupils' socioemotional needs and develop these skills to help them succeed in the future: trust, self-esteem, communication, curiosity, grit, gratitude, growth mind set, self-control, etc. For instance, in the United States, organizations such as Character Lab use the Character Growth Card and playbooks to guide students through different activities and goal-setting processes to build their socioemotional capacity.

- Create a targeted campaign to advertise vacancies and provide scholarships for students enrolled in pedagogical programs or in education-related university studies who are studying subject areas with shortages—for example, mathematics, English, Arabic, fine arts, science, and home economics. This scholarship would be contingent on students' commitment to the teaching profession for a minimum number of years.

Goal 5: Leading teachers with strong principals

Professional development and training opportunities are offered to principals/head teachers; however, those are not mandatory. Financial incentives for principals are based on performance at the school and individual levels.

- Provide principals with an obligatory coaching program, instructional leadership training, and ongoing professional development. For instance, principals in Shanghai participate in various kinds of leadership programs based on their years of service. There is a one-year training program that focuses on six key topics: school planning, internal management, school culture, instructional development, teacher growth, and adjustment to the external environment. The program takes place once a week and includes group lectures, individual research projects, field visits, and mentoring by experienced principals to new principals (World Bank 2016).
- Build on the existing methodology to reward principals based on school performance to include qualitative measures such as engagement in professional development opportunities, activities undertaken in schools to boost the morale of students and teachers, and

efforts undertaken to engage student families and communities.

Goal 6: Monitoring teaching and learning

Teachers are trained to assess student achievement, and systems are in place to assess student learning, but it does not appear that these systems are used to inform development of lesson plans and adjustment of instructional practices. Recent developments have been geared toward increased monitoring of teachers. This has to be balanced against learning opportunities for teachers and leeway to exercise autonomy.

- There is a need to redefine the scope of monthly monitoring visits to schools. Student performance is not expected to change significantly in a month nor can an adjustment in teaching practices bring about change that quickly. Monthly visits can be utilized to give feedback to teachers on instructional practices with every visit, not to contribute toward evaluation of their performance. A right mix of feedback and evaluation needs to be achieved.
- Strengthen the capacities of AEOs to analyze the results of student assessments. Training workshops for AEOs should also provide techniques for what skill each item on the assessment measures, how to analyze assessment data—comparing results at the school, tehsil, district, and provincial levels, and courses on how to use data to drive instructional improvement.

Goal 7: Supporting teachers to improve instruction

Mandatory professional development days for teachers are limited. Both external and internal evaluations are based on classroom observations; however, feedback processes to improve instructional practices need to be improved. A mentoring program has also been introduced, and staff strengthening is needed to separate this function from evaluation.

- Based on a needs assessment at the school level and on student results, implement in-service teacher training systems at the tehsil level with a wide selection of contents and methods (coaching, working in network, groups to analyze practices, class observations and visits, critical analysis of work sequences, use of tutorials, etc.). Moreover, assign professional development based on perceived needs at the

teacher level and prioritize those teachers whose teaching practices are identified weak during evaluations.

- Include subject and content knowledge components aligned with student learning standards and school curriculum as part of teacher professional development, especially in the light of revision of textbooks.
- Strengthen the training of AEOs, beyond simply verifying teachers' compliance with administrative instructions. Improve professional development programs for teaching to support new teachers entering the profession. Classroom observations, if implemented as one-on-one coaching experience, are beneficial for new teachers. The coaching process should support teachers in improving instructional quality, where they can also see its benefit in their students' improved academic performance. Skills covered in these coaching exercises could include lesson planning, asking questions to check for understanding, setting systems and routines, creating a supportive classroom environment, and building socioemotional skills in students.
- Broaden public teachers' exposure by sharing with them donor-funded, all-expenses-paid, international professional development opportunities. For example, the Teaching Excellence and Achievement Program provides outstanding secondary school teachers of English, social studies, math, science, and special education with unique opportunities to enhance their teaching skills and increase their knowledge about the United States. Teachers come to the United States from around the world for a six-week academic program at a U.S. university graduate school of education. To make this a possibility, also assist them in filling out applications and figuring out logistics.

Goal 8: Motivating teachers to perform

Promotion opportunities and salary increments are linked to years of service. Financial incentives are awarded based on performance of the school and the teacher. A teacher can continue to be in government service if their conduct remains in line with policies; therefore, a teacher's performance is generally not a cause for dismissal.

- Reward high-performing teachers with desirable financial bonus or nonmonetary incentives, such as teaching awards, as well as symbolic forms of recognition. Recognize teachers placed in hard-to-staff areas through fast-track promotion options. For comparability purpose, performance of such teachers should be related with teachers placed in schools facing similar circumstances.
- Perform annual performance reviews of teachers' activities that use a wider variety of instruments and methods (for example, the end-of-the-year evaluation individual meeting with each teacher etc.), which would ensure objectivity and enhance effectiveness.
- Career advancement opportunities in the teaching sector should be based on performance and not just years of service and academic qualifications. This may motivate incoming teachers to perform and hold senior teachers accountable to perform well throughout their teaching career.
- Given that evaluation by AEOs is not considered as transparent, process review and improvement are required to improve the reputation of the review process. Set up a fair system of monetary bonuses to incentivize teachers to improve their performance (i.e., they are tied to measures that capture effective teaching and student performance and are not related to the AEO's relationship with the school)
- Ensure that teachers are recognized and rewarded for investing time and effort into activities related to instructional improvement by making it a prominent part of the teacher standards and performance appraisals.
- Develop a culture of achievement at the school level by recognizing teachers that put in additional effort and encouraging their peers to observe classes of those teachers—this is one way of developing a culture of achievement in schools. Given that existing professional development activities of schools in the same vicinity are implemented together, such opportunities could be utilized to initiate observation visits of better-performing classrooms across schools.
- Review the existing Performance Evaluation Report to include evaluation criteria related to teaching profession.

Acknowledgments

This report was prepared by Hina Saleem (Global Engagement and Knowledge, Education Global Practice, World Bank), Shubham Adhikari, and Gustavo E. Castillo (Georgetown University) under the guidance of Ezequiel Molina, Tracy Wilichowski, Koen Geven, Tazeen Fasih, and Ali Ansari. It features country data collected by Dr. Faisal Bari, Sahar Kamran, and Fizza Raza, consultants, using the SABER–Teachers tool.

References

- ASER Pakistan. 2015. Pakistan Annual Status of Education Report 2015. Accessed May 21, 2017. http://aserpakistan.org/document/report_cards/2015/summary_report_cards/National.pdf. ASER, Islamabad.
- . 2016. Pakistan Annual Status of Education Report 2016. Accessed November 30, 2017. http://aserpakistan.org/document/report_cards/2016/summary_report_cards/National.pdf. ASER, Islamabad.
- Barber, M., and M. Mourshed. 2007. "How the World's Best-Performing School Systems Come Out on Top." McKinsey & Co., London.
- Campante, F., and E. L. Glaeser. 2009. "Yet Another Tale of Two Cities: Buenos Aires and Chicago." NBER Working Paper 15104. National Bureau of Economic Research, Cambridge, MA.
- Darling-Hammond, L. 2010. "Steady Work: How Countries Build Successful Systems." In Darling-Hammond, *The Flat World and Education: How America's Commitment to Equity Will Determine Our Future*. New York: Teachers College.
- Darling-Hammond, L., and R. Rothman. 2011. "Teacher and Leader Effectiveness in High-Performing Education Systems." Alliance for Excellent Education, Washington, DC.
- Hanushek, E. A., and S. G. Rivkin. 2010. "Generalizations about Using Value-Added Measures of Teacher Quality." *American Economic Review* 100 (2): 267–71.
- Hanushek, E., and L. Wössmann. 2007. "Education Quality and Economic Growth." World Bank, Washington, DC.
- Ingersoll, R. 2007. "A Comparative Study of Teacher Preparation and Qualifications in Six Nations."

- Consortium for Policy Researching Education, Philadelphia.
- ISAP-S. 2015. Public Financing for Education in Pakistan. Accessed May 21, 2017. http://isaps.org/upload/report_publications/docs/1434014326.pdf. ISAP-S, Islamabad.
- Levin, B. 2008. *How to Change 5000 Schools*. Cambridge, MA: Harvard Education Press.
- Ministry of Finance. 2017. Pakistan's Economic Survey 2016–2017. Accessed May 26, 2017. http://www.finance.gov.pk/survey_1617.html. Government of Pakistan, Islamabad.
- Naviwala, N. 2016. *Pakistan's Education Crisis: The Real Story*. Woodrow Wilson International Center for Scholars, Washington, DC.
- Nye, B., S. Konstantopoulos, and L. V. Hedges. 2004. "How Large Are Teacher Effects?" *Educational Evaluation and Policy Analysis* 26 (3): 237–57.
- OECD (Organization for Economic Co-operation and Development). 2012. "Preparing Teachers and Developing School Leaders for the 21st Century." OECD, Paris.
- Park, A., and E. Hannum. 2001. "Do Teachers Affect Learning in Developing Countries? Evidence from Matched Student-Teacher Data from China." Conference paper, Social Science Research Council, Park City, UT.
- Pasha, H. A. 2015. Growth of the Provincial Economies. Accessed December 6, 2017. <http://ipr.org.pk/wp-content/uploads/2016/04/GROWTH-OF-PROVINCIAL-ECONOMICS-.pdf>. Institute for Policy Reforms, Lahore Cantt, Pakistan.
- Pritchett, L., and M. Viarengo. 2009. "Producing Superstars for the Economic Mundial: The Mexican Predicament with Quality of Education." PEPG Working Paper 09-01, Program on Education Policy and Governance, Cambridge, MA.
- Rivkin, S. G., E.A. Hanushek, and J. F. Kain. 2005. "Teachers, Schools and Student Achievement." *Econometrica* 73 (2): 417–58.
- Rockoff, J. E. 2004. "The Impact of Individual Teachers on Student Achievement: Evidence from Panel Data." *American Economic Review* 94 (2): 247–52.
- Sanders, W. L., and J. C. Rivers. 1996. "Cumulative and Residual Effects of Teachers on Future Student Academic Achievement." Research Progress Report, University of Tennessee Value-Added Research and Assessment Center, Knoxville.
- UNESCO. 2015. Education for All—Pakistan National Review 2015. Accessed May 21, 2017. <http://unesdoc.unesco.org/images/0022/002297/229718E.pdf>. Ministry of Education, Trainings and Standards in Higher Education Academy of Educational Planning and Management, Islamabad.
- Vegas, E., et al. 2012. "What Matters Most in Teacher Policies? A Framework for Building a More Effective Teaching Profession." World Bank, Washington, DC.
- World Bank. 2017. Pakistan's Economic Overview. Accessed May 21, 2017. <http://www.worldbank.org/en/country/pakistan/overview>. World Bank, Washington DC.

Official Documents

- Category-wise Entitlements of Incentives (2011) [press release]
- Grant of Ad-Hoc Relief Allowance (2014) [press release]
- Punjab School Education Sector Plan 2013–2017.
- Recruitment Policy–2011 for Science, Mathematics, Computer Science, and English Educators [press release]
- Recruitment Policy–2013 For Educators [press release]
- Recruitment Policy–2016 For Educators and AEOS [press release]
- Resource Book on Education Management. Directorate of Staff Development (n.d.), government of Punjab, Pakistan
- Revision of Basic Pay Scale & Allowances of Civil Servants of the Punjab Government (2016) [press release]
- Transfer Policy 2013 [press release]

Appendix 1. SABER–Teachers Ratings

The SABER–Teachers team has identified policy levers (actions that governments can take) and indicators (measurements of the extent to which governments are making effective use of these policy levers) for each of the eight policy goals referenced in this country report. For example, for Teacher Policy Goal 1—Setting Clear

Expectations for Teachers—the SABER–Teachers team has identified the policy levers and indicators shown in table A1.

Table A1. Setting Clear Expectations for Teachers

Policy Levers	Indicators
A. Are there clear expectations for teachers?	1. Are there standards for what students must know and be able to do?
	2. Are the tasks that teachers are expected to carry out officially stipulated?
B. Is there useful guidance on the use of teachers’ working time?	1. Do teachers’ official tasks include tasks related to instructional improvement?
	2. Does the statutory definition of working time for primary school teachers recognize non-teaching hours?
	3. What is the share of working time allocated to teaching for primary school teachers?

For each goal in the country report, we define the goal in the first paragraph of the country report and identify the levers in the second paragraph. The remaining paragraphs provide details about the indicators that measure each of the levers.

Using the policy levers and indicators, SABER–Teachers classifies education systems’ performance on each of the eight teacher policy goals, using a four-category scale (latent, emerging, established, and advanced) The ratings describe the extent to which a given education system has in place teacher policies that are known to be related to improved student outcomes.

This four-tiered rating system represents a continuum, ranging from systems with more comprehensive, developed policies oriented toward learning, to systems with no policies at all (or, in some cases, policies that are detrimental from the perspective of encouraging learning). SABER–Teacher ratings can be defined in the following manner:

- **Advanced**—Systems are rated “advanced” toward a particular policy goal when they have multiple policies conducive to learning in place under each of the policy levers used to define a policy goal.
- **Established**—“Established” systems have at least one policy or law in place that uses those policy levers.
- **Emerging**—“Emerging” systems may have some appropriate policies in place under the policy goal.

- **Latent**—“Latent” systems have no or few appropriate policies in place under the policy goal. Please refer to Vegas et al. (2012) for a detailed review of policy levers and indicators assessed for each goal.

The Systems Approach for Better Education Results (SABER) initiative produces comparative data and knowledge on education policies and institutions, with the aim of helping countries systematically strengthen their education systems. SABER evaluates the quality of education policies against evidence-based global standards, using new diagnostic tools and detailed policy data. The SABER country reports give all parties with a stake in educational results—from administrators, teachers, and parents to policy makers and business people—an accessible, objective snapshot showing how well the policies of their country's education system are oriented toward ensuring that all children and youth learn.

This report focuses specifically on policies in the area of teacher policies.

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