Mexico

TEACHERS

Policy Goals   Status

1. Setting Clear Expectations for Teachers
Clear expectations have been established for what students should learn and what teachers should do in Mexico.

Established

2. Attracting the Best into Teaching
While in relative terms teacher salaries are not as competitive as those in other professions, there are advantages that make the teaching profession an attractive option.

Established

3. Preparing Teachers with Useful Training and Experience
Teacher initial education emphasizes practical experience. The last year is fully devoted to supervised teaching practice.

Established

4. Matching Teachers' Skills with Students' Needs
Teachers assigned to hard-to-staff schools receive higher incentives based on performance.

Emerging

5. Leading Teachers with Strong Principals
Principals and supervisors have the responsibility of providing support to teachers in their efforts to improve teaching practices. School leadership positions are assigned based on merit and evaluation results.

Established

6. Monitoring Teaching and Learning
Standardized exams are applied systematically to students enrolled in compulsory education, and teacher performance is evaluated every four years.

Established

7. Supporting Teachers to Improve Instruction
Teachers, principals and supervisors have access to a wide range of professional development programmes and school-based learning.

Advanced

8. Motivating Teachers to Perform
There are opportunities for horizontal and vertical promotions based on evaluation results. Incentives increase substantially as teachers progress up the ladder.

Advanced

Data collection on Mexico's teacher policies was completed in 2015. Consequently, the findings in this report reflect the status of the country's teacher policies at that time.

Systems Approach for Better Education Results

Teachers for
Education 2030

THE WORLD BANK

Overview of SABER-Teachers

There is growing interest across the globe in attracting, retaining, developing and motivating great teachers. Student achievement has been found to correlate with economic and social progress (Hanushek and Woessmann, 2007, 2009; Pritchett and Viarengo, 2009; Campante and Glaeser, 2009). Teachers are the key. Recent studies have shown that teacher quality is the main school-based predictor of student achievement; several consecutive years of outstanding teaching can offset the learning deficits of disadvantaged students (Hanushek and Rivkin, 2010; Rivkin, Hanushek and Kain 2005; Nye and Hedges, 2004; Rockoff, 2004; Park and Hannum, 2001; Sanders and Rivers 1996). However, formulating appropriate 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, the impact of many reforms depends on specific design features, and teacher policies can have quite different impacts depending on the context and other education policies already in place.

SABER-Teachers aims to help fill this gap by collecting, analysing, synthesizing and disseminating comprehensive information on teacher policies in the primary and secondary education systems around the world. SABER-Teachers is a core component of SABER (Systems Approach for Better Education Results), an initiative of the World Bank Education Global Practice. SABER collects information on the policy domains of different education systems, analyses it to identify common challenges and solutions, and makes this information widely available to inform countries' policy-makers on where and how to invest to improve the quality of education.

SABER-Teachers collects data on ten core areas of teacher policy to offer a comprehensive descriptive overview of the policies in place in each participating education system (Box 1). Data are collected in each participating education system by a specialized

consultant using a questionnaire so as to ensure the comparability of information across different education systems. Data collection focuses on the rules and regulations governing teacher management systems. This information is compiled in a comparative database. Interested stakeholders can access the database for detailed information, which is organized into categories that describe how different education systems manage their teaching force, as well as copies of supporting documents. The full database is available on the SABER website.

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 non-salary 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 analyses these data to assess how well each system's teacher policies promote student achievement based on the global evidence to date. Specifically, SABER-Teachers assesses each education system's progress in achieving eight teacher policy goals (Box 2).

Box 2. Teacher policy goals for evaluation

1. Setting clear expectations for teachers
2. Attracting the best into teaching
3. Preparing teachers with useful training
4. Matching teachers' skills with students' needs
5. Leading teachers with strong principals
6. Monitoring teaching and learning
7. Supporting teachers to improve instruction
8. Motivating teachers to perform

Figure 1. Eight teacher policy goals

All high-performing education systems fulfil these eight teacher policy goals to a certain extent in order to ensure that every classroom has a motivated, supported and competent teacher. These goals were identified through a review of research studies on teacher policies, as well as an analysis of policies of top-performing and rapidly improving education systems. Three criteria were used to identify the teacher policy goals, which had to be: (1) linked to student performance through empirical evidence; (2) a priority for resource allocation; and (3) actionable, meaning that they identify actions that governments can take to improve education policy. The eight teacher policy goals exclude other objectives that countries might wish to pursue to increase the effectiveness of their teachers, but on which there is too little empirical evidence at present to allow for specific policy recommendations.

By classifying countries based on their performance in each of the eight teacher policy goals, SABER-Teachers helps diagnose the key challenges to cultivating effective teachers. For each policy goal, the SABER-Teachers team identified policy levers (actions that governments can take to reach these goals) and indicators (that measure the extent to which governments are making effective use of these policy levers). Using these policy levers and indicators, SABER-Teachers classifies the progress of education systems towards achieving each of the eight teacher policy goals using a four-tiered scale (latent, emerging, established and advanced). The scale assesses the extent to which a given education system has put in place the type of teacher policies related to improved student outcomes (Annex 1). The main objective of this assessment is to identify the strengths and weaknesses of the teacher

policies of an education system and thus pinpoint possible areas for improvement (Vegas et. al 2012).

The main focus of SABER-Teachers is policy design, not policy implementation. SABER-Teachers analyses the teacher policies formally adopted by a given education system. This type of analysis is an important first step towards strengthening the policy and institutional frameworks that policy-makers most directly control and that influence how well a system functions. At the same time, policies 'on the ground', i.e. policies as they are actually implemented, may differ quite substantially from policies as originally designed. In fact, they often do differ due to the political economy of the reform process, lack of capacity on the part of the organizations charged with implementing them, and/or the interaction between these policies and specific contextual factors. Since SABER-Teachers collects only limited data on policy implementation, the analysis of teacher policies presented in this report should ideally be complemented with other data-gathering efforts that focus on how well teacher policies are actually implemented on the ground.

This report presents the results of the SABER-Teachers tool as applied in Mexico. A collaborative effort between the **International Task Force on Teachers for Education 2030,** hosted within UNESCO, and the **World Bank SABER-Teachers initiative** made this report possible. All data collection, related analysis and report preparations were completed by UNESCO using the World Bank Group's SABER tools. The report describes the performance of Mexico's education system in achieving each of the eight teacher policy goals. It also contains comparative information from education systems that have consistently scored highly on international student achievement tests, and those that have previously participated in the SABER-Teachers initiative. This report has been formally endorsed by the Mexican Secretariat of Public Education. Additional information on the teacher policies in the education systems of Mexico and other countries can be found on the SABER-Teachers' website.

Country Context

Economic Context

By 2014, the Mexican GDP was the fourteenth largest in the world and second in the Latin American region adjusted by purchasing power parity (PPP) (IMF, 2016). The Organisation for Economic Co-operation and Development (OECD) also stated in a report that the implementation of structural reforms in telecommunications, finance, tax and energy have led to continued growth, even during the global turmoil caused mainly by drops in commodity prices, including oil (OECD, 2015*a*).

The World Bank (2016) foresees an expansion of economic activity taking place in the upcoming years due to higher investments and private consumption, along with an increase in exports. Ultimately, this will contribute to Mexico's continued economic growth and development. In this sense, the International Monetary Fund (IMF) projects that by 2022 the Mexican GDP adjusted by PPP will turn Mexico into the world's 11th economy (IMF, 2017).

Education Context

The Education System is comprised of basic education, upper secondary school and higher education. The basic education level in Mexico is compulsory and it includes preschool (3-5 years old), primary (6-12 years old), lower secondary levels (12-15 years old) and upper secondary (15-18 years old). It also includes both General and Technological High Schools and Technical and Vocational Education.

Access to education has increased in the past two decades. Pre-primary net enrolment rates went from 62.8 per cent in 2002 to 68.7 per cent in 2014 (World Bank EdStats, 2014). Similarly, in 2002, 71.3 per cent of students were enrolled in lower secondary compared with 78 per cent in 2012 (World Bank EdStats, 2012). At the primary education level, there are currently 97.6 per cent of students enrolled (World Bank EdStats, 2014). Furthermore, the public school system covers nearly 86.1 per cent of students enrolled in basic education in Mexico. However, challenges remain in terms of access to pre-primary and secondary education. Still, nearly 30 per cent of preschool aged children are not enrolled in the education system and 47.4 per cent of appropriately aged youth are not enrolled in upper secondary (World Bank EdStats, 2014).

In addition, the quality of education remains low compared with other OECD countries. In Mexico, on average, 57 per cent and 42 per cent of the students do not possess basic competence in mathematics and reading, respectively, according to the results of the Program for International Student Assessment (PISA) (OECD, 2016). Similarly, in the national learning assessment test (INEE, 2015*d*), 83 per cent of sixth-graders scored in the two lowest performance levels in language, and 79 per cent did so in mathematics (INEE, 2015*d*).

In order to address the challenge of low education quality, in 2013 the federal government launched a national reform initiated with a Constitutional Amendment that mandated the Mexican State to provide high quality education services to all children and youth. The amendment further specified that teaching methods and didactic materials, school organization, infrastructure, and teachers' and principals' effectiveness had to be geared towards achieving the maximum student learning levels for all children and youth. More recently, in 2015 the Education Secretariat announced seven policy priorities for the reform: 1. strengthening schools; 2. investment in infrastructure, equipment and education materials; 3. teacher professional development; 4. curriculum; 5. equity and inclusion; 6. establishment of links between education and the labour market; and 7. administrative and organizational restructuring. These reform efforts were successfully supported by federal and local legislators who were responsible for approving the Constitutional Amendment and for passing subsequent regulations such as the laws governing the teaching profession (Beltran and Cruz, 2015; Backhoff and Guevara, 2015).

Teacher Policy Context

The 2013 Constitutional Amendment laid the foundations for the establishment of the National Institute for the Evaluation of Education (INEE – for its acronym in Spanish) and the Professional Teaching Service (SPD – for its acronym in Spanish). The INEE is responsible for evaluating the quality, performance and results of the education system. Similarly, the Professional Teaching Service Law establishes the main regulations that govern the teaching profession, including teacher recruitment, training, promotion, retirement, and the tenure for teachers, principals, supervisors and technical-pedagogical advisors. This law built on the progress made by previous regulations. It

implemented public contests to select new teachers into the teaching profession as well as merit-based promotion mechanisms for current teachers who intend to become principals or take on either management or support roles. It also implemented teacher performance evaluations, among other mechanisms aimed at improving teaching effectiveness.

Republic of Mexico's Teacher Policy System Results

Goal 1: Setting clear expectations for teachers

Established●●●○

Setting clear expectations for the student and teacher's performance is important for guiding the teachers' daily work and aligning the resources necessary to help them constantly improve on their instructional practice. In addition, clear expectations help to ensure coherence among the various 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 Goal 1: (1) clear expectations of what students should know and be able to do; and (2) useful guidance on teachers' use of time in order to improve instruction at the school level.

Policy

 (1) In Mexico, there are clear expectations of what students should know and be able to do after completing each school grade. The national curriculum (2011) articulates expected learnings from preschool to secondary (12 years), proposes a competency-based pedagogical perspective, and defines curricular standards in the areas of Spanish, mathematics, English as a second language, and digital abilities. The curriculum specifies learning outcomes for students that complete each level within the education system along with a formative evaluation approach. In addition, there are two compulsory documents that establish standards for teachers in their work in schools and are valid nationwide: The Study Plan and the Teacher Guide. The Study Plan specifies the content that teachers are expected to teach according to the curriculum, and the Teacher Guide outlines what teachers must do in the

classroom over the academic year in order to follow the curriculum and the Study Plan.

(2) Mexico has a statutory definition of teachers' working time that recognizes non-teaching hours. Successful education systems such as those of Ontario, Finland, Japan, South Korea and Singapore devote considerable time at the school level to activities that are related to instructional improvement, such as collaboration among teachers on the analysis of instructional practice, mentoring, and professional development (Darling-Hammond and Rothman, 2011; Darling-Hammond, 2010; Levin, 2008). In addition, these systems tend to devote a smaller share of a teacher's time to actual contact time with students, but a relatively larger share of time to teacher collaboration, on-site professional development, and research on the effectiveness of various teaching strategies. Japan, for example, devotes about 40 per cent of teachers' working time to these types of activities, while Ontario currently devotes 30 per cent (Darling-Hammond and Rothman, 2011). By policy, primary school teachers in Mexico work up to 25 hours per week, and secondary school teachers up to 42 hours. During this time, teachers are expected to carry out extracurricular activities, school projects and administrative tasks, as well as participate in the School Council, which was recently created by the reform of 2012 to increase school autonomy and improve student learning outcomes. It is composed of all school teachers and chaired by the principal, and it sessions five times at the beginning of the school year and once every month. School Councils were established to plan and implement initiatives designed to increase academic achievement within schools. Through their participation in the School Council, teachers and peer mentors collaborate on the school plan, design the curriculum, and participate in the school's evaluation (Table 1). Despite the establishment of School Councils by the reform, Mexico still allows teachers to teach double shifts or work in multiple schools, so it is still unclear how much time teachers should spend in School Council activities vis-à-vis their other professional responsibilities.

Implementation

The Secretariat of Public Education reported that from 2009–2012, 1.3 million teachers (100 per cent) received appropriate training in pedagogical foundations and content of the national curriculum (see also Goal 6). The Technical Support group is still in the process of implementation.

Table 1. Teachers' official tasks related to instructional improvement

	Mexico	Egypt	Jordan	Lebanon	Tunisia
Mentor peers	✓	✓	✓	✓	✓
Collaborate on school plan	✓				✓
Design curriculum	✓		✓		✓
Participate in school evaluation	✓	✓		✓	✓

Source: SABER-Teachers data

Goal 2: Attracting the best into teaching

Established ● ● ● ○

The structure and characteristics of a teaching career can make it more or less attractive to talented individuals. They may be more inclined to become teachers if they see that entry requirements are on par with those of well-regarded professions in which compensation and working conditions are adequate, and attractive professional development opportunities exist.

SABER-Teachers considers four policy levers that school systems can use to reach Goal 2: (1) requirements for entering the teaching profession; (2) competitive pay; (3) appealing working conditions; and (4) attractive career opportunities.

Policy

(1) Requirements to enter the teaching profession are stringent in Mexico and include a bachelor's degree and teachers' participation in open merit-based contests. Education systems where teacher positions are competitive often have rigorous entry requirements. Systems where entry to the profession is most demanding require a research-oriented bachelor's or master's degree. The required level of education for teachers may indicate the attractiveness of the profession. In Mexico, the Professional Teaching Service

has defined the requirements, specific criteria, parameters and indicators that guide the selection of those who respond to the open contest to obtain an available position. The main level of education required to enter into teaching is a tertiary education degree (ISCED 5A), which can be provided by Normal Schools or universities. Moreover, teacher candidates for all levels are also required to sit a test that measures teaching practice, general knowledge of the curriculum of primary school, cognitive abilities, and professional ethics (SEP-CNSPD, 2015*a*). In addition to this selection process, secondary school teachers also sit a test to measure their knowledge of the subject they are applying to teach. Ultimately, applicants of both primary and secondary, levels who pass the selection process are assigned to schools with available positions. In this sense, all successful applicants enter a priority list, and those with higher grades in the selection process will be assigned to their preferred school. By policy, teachers who do not pass the selection process are not allowed to enter the teaching service. Teachers who succeed also begin a 2-year trial period along with mentoring and coaching (see Goal 8).

(2) Teacher compensation in Mexico can play a pivotal role in making the teaching profession more attractive. Teacher salaries in Mexico, according to rigorous studies (Santibáñez, 2002; INEE, 2015*a*), are competitive with respect to earnings received by other professionals when the integrated package of benefits and bonuses are factored in. Increased earnings, depending on the results of the quadrennial performance evaluations, may be expected after the education reform of the teaching profession. This policy may potentially make the teaching profession more attractive to qualified candidates.

(3) Work conditions may also be attractive for teachers. Working conditions can 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 unpleasant, unreliable or unsafe. SABER-Teachers measures working conditions through pupil-teacher ratios to monitor overcrowding and compliance with infrastructure requirements. In Mexico, the most recent available school census data in 2014 suggested that the adequate student/teacher ratios (Figure 2) should be an average 25 pupils per teacher in primary education and 28 in secondary education (SEP, 2015).

Mexican teachers are expected to work 200 days per year and are entitled to almost ten weeks of paid leave, in contrast with the 1-2-week period for most workers. These conditions may make the teaching profession attractive compared to other careers.

(4) Promotion opportunities for teachers exist, and they are meritocratic. Teachers in most education systems have the opportunity to be promoted to the position of principal at some point in their careers. In addition to these 'vertical' promotions, most high-performing education systems also offer 'horizontal' promotions to academic positions that allow teachers to grow professionally, yet remain closely connected to instruction instead of moving to managerial positions (OECD, 2012; Darling-Hammond, 2010). In Mexico, all in-service teachers are subject to performance evaluations designed by the INEE. Criteria, parameters and indicators are widely disseminated among teachers along with study guides and other resources. Teachers who pass the evaluation can participate in the promotion programme, which seeks explicitly to recognize merit, foster continued development, enhance living conditions, and increase the social prestige of the profession (SEP-CNSPD, 2015*b*). The programme also allows vertical and horizontal promotions. It is expected that performance evaluation processes enhance professional practice and contribute towards identifying teachers' individual needs for professional development offered by the government. In-service teachers who do not pass the evaluation will receive mentoring and training for one year, after which they are re-evaluated. Those who pass will have four years of continuity and will be offered appropriate professional development. Those who fail are allowed to take the test again after an additional year of coaching and mentoring. In-service teachers who do not pass the test for the third time can be banned from teaching, but may be assigned to administrative tasks within the school.

Implementation

In the first national contest (2014) to enter the teaching profession, only 39 per cent of the 130,512 applicants were successful. As a group, normal school graduates scored higher than their peers, however, less than half met the requisite standards. In 2015, the proportion of successful candidates continued to be low (40 per cent of 116,036) (INEE, 2015*b*). Currently, because of the contest, all available teaching positions are assigned only to individuals that meet the academic requirements

(ISCED 5A or graduate degree), with specific knowledge of the subject required by the position.

Figure 2. Student-teacher ratio, primary school
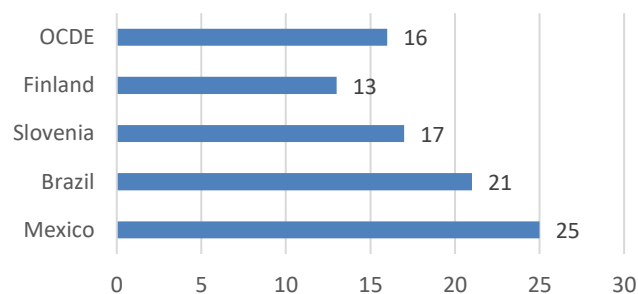
Source: SEP and World Bank Edstats. Mexico data from 2014, all other data from 2013

Goal 3: Preparing teachers with useful training and experience

Established●●●○

It is crucial to equip teachers with the skills they need to succeed in the classroom. Success requires subject matter and pedagogic knowledge, as well as classroom management skills and a great deal of teaching practice. Good preparation puts all teachers on an equal footing, giving them a common framework for improving their instructional practice.

SABER-Teachers considers two policy levers that school systems can use to reach Goal 3: (1) minimum standards for pre-service training programmes; and (2) required levels of classroom experience for all teachers.

Policy

(1) In Mexico, teacher initial education is provided by higher education institutions. Virtually all high-performing countries require that teachers have an educational level equivalent to ISCED 5A (a bachelor's degree), with some systems requiring an additional research-based master's degree (OECD, 2011). Normal Schools, typified as higher learning institutions (ISCED 5A), have traditionally trained basic education teachers. But teacher education programmes are also now available in universities. The main requirement to enter teacher education programmes is a high school diploma and the candidate's participation in the general entrance examination exam for tertiary education level. The plans and programmes of study of the 22 degrees on offer are

centrally defined and observed nationwide. Public and private universities also offer initial education programmes. There are 695 registered establishments who offer initial training and whose graduates may participate in contests to enter the teaching service (INEE, 2015*a*).

(2) Practical classroom experience requirements for teacher education programmes exist in Mexico. Practical experience is a critical factor in the preparedness of teachers upon entering the profession. The more teachers are able to try out their pedagogical theories, subject-matter knowledge and classroom management skills, the better prepared they are for their careers. Most high-performing systems require teacher entrants to have considerable classroom experience before becoming independent teachers; some of these systems also provide mentoring and support during a teacher's first and even second year on the job (Darling-Hammond, 2010; Ingersoll, 2007). In Mexico, training in Normal Schools has traditionally included practicum and intense supervised practice in an assigned school over the last period of the degree programme. The new tertiary education programme of 2012 includes practice from the first to the last semester. Compulsory courses include observation, analysis of practice, didactic strategies, and socio-educational intervention project design (DGESPE, 2012; INEE, 2015*b*).

Implementation

Recent research shows that there is a need to update teacher training programmes provided by Normal Schools. Although Normal Schools have traditionally offered teacher education programmes designed to develop competencies such as lesson planning, subject-knowledge, classroom management, self-assessment and pedagogical skills, there is evidence that these programmes have to be updated to be better aligned with the new requirements to enter the teaching profession, as well as the latest evidence of what works in education (PROMIN 2009–2012 and PEFEN 2012–2015; INEE, 2015*a*, 2015*b* and 2015*c*). Normal Schools were reformed in 2012, but a new reform is currently underway to respond to this ongoing challenge, which will aim to: (i) foster academic innovation; (ii) stimulate institutional development; and (iii) enhance professional development for teachers within Normal Schools.

Goal 4: Matching teachers' skills with students' needs

Emerging●●○○

Ensuring that teachers work in schools where their skills are most needed is important for the equity and efficiency of an education system. First, it is a way of distributing teachers as efficiently as possible, making sure that there are no shortages of qualified teachers in any given grade, education level or subject. Second, it is a means of ensuring that all students in a school system have an equal opportunity to learn. Without purposeful allocation, it is likely that teachers will gravitate towards schools serving better-off students or those located in more desirable areas, deepening inequalities in the education system.

SABER-Teachers considers two policy levers that school systems can use to reach Goal 4: (1) incentives for teachers to work in hard-to-staff schools; and (2) incentives for teachers to teach subjects in which there is a critical shortage of instructors.

Policy

(1) Incentives and other mechanisms are in place to attract teachers to work in hard-to-staff schools and to increase access to education services. Attracting effective teachers to schools that are in disadvantaged areas or serve underprivileged populations is a challenge for many countries and often requires a specific set of incentives. In Mexico, multiple monetary incentives exist for teachers assigned to schools that serve indigenous students and underserved communities. These incentives include: higher salaries, better chances of promotion, and monetary bonuses. However, the general objective of reaching universal access to primary and secondary education remains a challenge due to population dispersion in rural areas; a condition that affects mostly indigenous children and children of migrant workers. In fact, the 2010 census reported that over 6 million children aged 3-17 were out of school. Another initiative of the government to tackle out-of-school children has been the 'Educational Agents Program' by the Consejo Nacional de Fomento Educativo (CONAFE). CONAFE is a public institution that has developed education models conceived to serve isolated populations in their own communities and through non-professional teaching personnel called Educational Agents. Educational agents are young ISCED 3 graduates

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who receive some training and serve in the villages in exchange for a scholarship and the opportunity to continue with higher education studies after their period of service (CONAFE, 2011). Although this policy aims at providing education services to children who live in rural areas who otherwise would remain out of the education system, it fails to assign effective teachers to the most disadvantaged students.

(2) No incentives are in place to teach critical shortage subjects. Most education systems have at least some subjects for which there is a critical shortage of teachers, i.e. too few teachers to meet students' needs. Successful systems develop policies and incentives that encourage teachers to teach these subjects. Monetary bonuses, scholarships and career opportunities are all examples of these incentives. As of 2015, there was no policy in place in Mexico to motivate teachers of critical shortage subjects. However, the new Professional Teaching Service plans to identify critical shortage subjects and offer additional incentives for qualified teachers who decide to teach them.

Implementation

The promotion programme offers incentives that range from 35 per cent to 180 per cent of the generic salary to urban teachers, and from 41 per cent to 222 per cent to those in dispersed communities and marginal urban areas. In all cases, incentives depend on the results of performance evaluations and the submission of complementary examinations based on instruments defined by the INEE (See Goal 6). However, although incentives are in fact in place, high-performing and qualified teachers may not be enough and are still not attracted to teach in vulnerable areas. Additionally, the CONAFE model has been externally evaluated and results show that it has increased access to education, but quality still remains low (CONEVAL, 2012; ACUDE, 2013; Valencia, 2014).

Goal 5: Leading teachers with strong principals

Established●●●○

The quality of school heads is an important predictor of student learning. Capable principals act as instructional leaders, providing direction and support to teachers in order to improve 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 Goal 5: (1) investment by the education system in developing qualified school leaders; and (2) the decision-making authority given to school principals to support and improve instructional practice.

Policy

(1) Training designed to develop leadership and management skills for principals and supervisors is available in Mexico. Research from high-performing education systems suggests that principals can develop leadership skills through supported work experience or specific training courses. For example, the systems of Japan, South Korea, Shanghai (China) and Singapore all require that applicants for principal positions participate in specific coursework and/or a specialized internship or mentoring programme designed to develop essential leadership skills (OECD, 2012; Darling-Hammond, 2010). The Mexican Law of the Professional Teaching Service (DOF, 2013) defines the profile, parameters and indicators pertaining to principals, supervisors and technical pedagogical personnel. This law recognizes the importance of school leadership to increase the quality of teaching and learning. Online courses and workshops are available to all principals. Continuing education has been a long-standing tradition of the profession. Courses and workshops were designed to enhance pedagogical leadership, conflict resolution abilities, planning, academic mentorship, and school management competencies. Current practice also provides an induction programme with mentoring for newly appointed school authorities during their first year in the position. In Mexico, requirements to become a principal include: (i) having at least two years of professional teaching experience; (ii) having completed a bachelor's programme or *licenciatura;* (iii) passing a written text; and (iv) participating in an induction programme with mentoring activities. Participating in an internship is not required (Table 2).

Table 2. Mechanisms to support the development of principals' leadership skills

	Mexico	Japan	Shanghai	Singapore	South Korea
Courses or other training requirements	✓		✓	✓	✓
Participation in mentoring or internship programme	✓	✓		✓	

Source*:* SABER-Teachers database

(2) Mexican principals are responsible for the organization, operation and management of the school, but do not manage or oversee the school's budget. Once education systems have qualified principals in place, they need to focus on improving classroom instruction (Barber and Mourshed, 2007). High-performing education systems such as those of Finland, Ontario (Canada) and Singapore consider their principals to be instructional leaders: they are expected to be knowledgeable in teaching and curriculum matters, as well as provide guidance and support to teachers. Principals in these systems evaluate teachers, provide feedback, assess their school's needs for professional development, and direct instructional resources where they are most needed (Darling-Hammond and Rothman, 2011). Principals are key to the continuous improvement of educational results. By policy, Mexican principals participate in teachers' evaluations by producing a report to assess teacher's compliance with professional responsibilities. They also manage the distribution of time during school hours, and provide guidance for curriculum and teaching-related tasks. They also respond to requests from local, sub-national and national education authorities, represent the school at community meetings, and supervise teachers' duties and responsibilities. In this sense, principals are expected to promote good teaching practices, equitable student learning, inclusion, gender equality and the observance of children's rights with the support of supervisors and technical pedagogical personnel. However, they do not have the authority to hire or fire teachers. This is the responsibility of the Secretariat of Public Education.

Implementation

Between 2011 and 2012, the Secretariat of Public Education reported that over one million teachers, principals, supervisors and technical staff in basic education had participated in at least one continuing education option. In 2015, according to the report, 7 per cent of all participants were principals or supervisors. Similarly, TALIS (2013) (INEE, 2015*c*) demonstrated that virtually all basic education teachers and principals engage in courses, workshops and degree programmes. Nevertheless, over half of Mexican principals who participated in courses and workshops found the content irrelevant (SEP, 2012; INEE, 2015*c*). In 2015, 14,114 teachers who met the requirements and succeeded in the evaluation process were promoted to principal, supervisor and technical positions. By the end of 2016, principals will be evaluated; a process that will improve the strategy to provide more pertinent and contextualized professional development.

Goal 6: Monitoring teaching and learning

Established ●●●○

It is essential to assess how well teachers are teaching and whether students are learning in order to devise strategies to improve both processes. First, education systems must identify poorly performing teachers and students before they can provide struggling classrooms with the adequate support they need. Second, teacher and student evaluations help identify good practices, which can be shared across the system to help improve school performance.

SABER-Teachers considers three policy levers that school systems can use to reach Goal 6: (1) availability of data on student achievement; (2) adequate systems for monitoring teacher performance; and (3) multiple mechanisms for evaluating teacher performance.

Policy

(1) Student achievement data are collected in Mexico and made available to inform teaching and/or policy. All high-performing education systems monitor student performance to inform teaching and teacher policies, but they do so in very different ways. They may conduct large-scale system-wide assessments, student evaluations (by teachers), or employ other standardized student learning methods. Regardless of the mechanisms

they use, high-performing systems ensure that three main functions are fulfilled:

1. The education system collects complete and relevant student achievement data on a regular basis.

2. Public authorities have access to these data and use them to inform policy-making.

3. A feedback mechanism shares these data and relevant analyses at the school level, which is then used by teachers to improve their instructional practice.

National exams have included instruments to assess the degree to which students understand curriculum content by the time they enter the first year of primary education, and up to the intermediate stages and completion of the ninth year.

From 2008 to 2014, the annual application of the National Assessment of Academic Achievement in Schools (ENLACE – for its acronym in Spanish) informs on individual and school level achievement. Furthermore, in 2015, a new generation of standardized exams, designed by the INEE, was launched with the expectation of monitoring individual learning through the compulsory education levels, thus increasing the quality and specificity of microdata to be utilized by school communities, and for local and federal authorities to make better and contextualized decisions about teaching and learning. Reports and analyses of results have been published and are widely available in official web pages.

(2) The National Institute for the Evaluation of Education, the National Professional Teaching Service and educational authorities have the adequate mechanisms in place to monitor teacher performance. Teacher performance evaluation results, mandated under the Law of the Professional Teaching Service (DOF, 2013) through the application of multiple instruments, assesses the degree to which teachers comply with an expected set of criteria, including subject-matter knowledge, teaching pedagogical methods, and student assessment methods. As of 2015, student achievement was not considered in teacher evaluations. Teacher evaluation criteria are specified in the policy 'Criteria, parameters and indicators' by the INEE (Table 3). This document contains guidelines for the design of the instruments used to evaluate candidates entering the profession, progressing in their career, or promoted to the positions of principal, supervisor or technical personnel (ATP – for its acronym in Spanish). Evaluation

results are disseminated through a personalized performance report. The report also identifies professional development options relevant to the individual. In turn, federal and local authorities are responsible for providing relevant training alternatives to respond to teachers' right to continue their professional development.

(3) Multiple instruments are used to evaluate teacher performance in Mexico. Research suggests that no single method of evaluating teacher performance is fail-safe. Most high-performing systems conduct teacher evaluations using multiple data collection mechanisms and varied assessment criteria. Ideally, a comprehensive teacher evaluation framework combines student results, teachers' portfolios, classroom observations and student/parent feedback. International experience and research both indicate that none of these approaches taken separately produce a balanced and objective evaluation of teacher performance. Mexico also has a teacher evaluation framework that uses various assessment criteria and multiple mechanisms to collect data. Fundamentally, there are two evaluation schemes to assess teacher performance in Mexico:

a) Internal school-based evaluations: coordinated by principals and designed to track progress towards achieving students' learning goals, and comply with school development plans.

b) External evaluations or performance evaluations: these evaluations seek to assess teachers to ensure they have a sufficient level of proficiency. They also contribute towards identifying training needs and using results as inputs for progression in the teaching service. Performance evaluations consist of: (i) the principal's report of compliance with professional responsibilities; (ii) a portfolio with evidence on teacher's experience, which includes samples of his or her teaching work; (iii) a knowledge and competency test; and (iv) the teacher's academic planning. In addition to those requirements, secondary school teachers who teach a secondary language (e.g. English) have to take a complementary test in that language. Teachers who score above the 'sufficient' level have to participate in the evaluation every four years, according to the law. Similarly, these performance evaluations have consequences for underperforming teachers. Those who score 'insufficient' or below will have to retake the evaluation the following year, and throughout that period of time they will receive coaching and

mentoring to help them improve. Teachers who fail the performance evaluation on three consecutive occasions will be removed from the classroom.

Although performance evaluations are now mandatory for all teachers, the Institute has announced that these are context-sensitive, i.e. evaluation results for teachers who teach in rural and isolated areas are pondered differently than those who teach in urban and non-vulnerable areas (SEP-CNSPD, 2015*b*).

Table 3. Criteria for evaluating teacher performance

	Mexico	Japan	Shanghai	Singapore	South Korea
Subject matter knowledge	✓	✓			✓
Teaching methods	✓	✓	✓	✓	✓
Student assessment methods	✓	✓	✓	✓	✓
Student academic achievement			✓		

Source*:* SABER-Teachers database

Implementation

In the past decade, Mexico has developed the use of standardized national and international tests to monitor student learning results, and has assembled evidence on teacher performance. Standardized exams may have increased accountability and transparency, but the use of data in schools is still limited. To address this problem, education reform policies gave school supervisors the responsibility to assign professional development activities to both teachers and principals. In this sense, schools are encouraged to design development plans informed by student learning outcomes. The mechanism defined in the reform to stimulate the use of information about student and school results is the establishment of SATE, (System of Technical Assistance for Schools), which is a support

group led by a supervisor whose activities include the interpretation and use of data as the basis for planning how to achieve higher learning outcomes. Recently, the Secretary of Public Education reported that 134,140 in-service teachers, or 90 per cent of those selected in the first stage of the Performance Evaluation, were evaluated in 2015. Approximately half of them obtained insufficient and average results; 40.5 per cent scored well and are eligible for the promotion programme, which will provide them with monetary incentives, and only 7.9 per cent are considered outstanding teachers. It was also announced that teachers who refused to participate (2.2 per cent) would be fired (SEP, 2016*a*).

Goal 7: Supporting teachers to improve instruction

Advanced●●●●

Support systems help improve instruction at the school level. In order to continually improve their practices, teachers and schools need to be able to analyse the specific challenges they face in classroom teaching, to access information on best practices for addressing these challenges, and to receive specific external support tailored to their needs.

SABER-Teachers considers three policy levers that school systems can use to reach Goal 7: (1) opportunities for teacher professional development; (2) collaborative professional development that focuses on improving instruction; and (3) assignment of professional development training on the basis of perceived need.

Policy

(1) Mexican teachers are required to participate in teacher professional development activities. The State is obliged to provide all teachers, principals, supervisors and technical pedagogical personnel with professional development opportunities, continuous education, specific training and regularization at no cost. The options should be diverse, academically sound and the offering must respond to individual needs and the results of student learning. Subnational authorities are also mandated to offer professional development opportunities for teachers, principals, technical pedagogical personnel and supervisors in their territories (DOF, 2013). On a yearly basis, 21 days of professional development are mandatory for all teachers (Figure 3).

(2) Professional development opportunities in Mexico are collaborative. Research suggests that effective teacher professional development is collaborative and provides opportunities for an in-school analysis of instructional practice. As mentioned earlier, high-performing education systems such as those in Japan and Ontario (Canada) devote as much as 30 per cent of teachers' school time to professional development and instructional improvement activities. These activities include observation visits to other schools and participation in teacher or school networks, engaging in research, and mentoring and/or coaching. In Mexico, school-based collaborative learning and planning is encouraged through the mandatory monthly all-day sessions of the School Technical Council where student learning problems are addressed. Led by the principal, in close collaboration with the supervisor, the teaching body designs strategies to improve student learning (SEP, 2013).

(3) Teacher professional development is assigned based on perceived students' needs. In Mexico, recent policies advocate that professional development activities are assigned based on the needs of schools and teachers. In this sense, the Education Reform created a Technical Support Group composed by experts to provide technical assistance and pedagogical support to schools in order to help them improve student learning outcomes. In addition, as previously mentioned, teachers who underperform in the evaluation are also given professional development opportunities, including mentoring and coaching, to help them improve their teaching practice.

Figure 3. Required or suggested days of teacher professional development per year
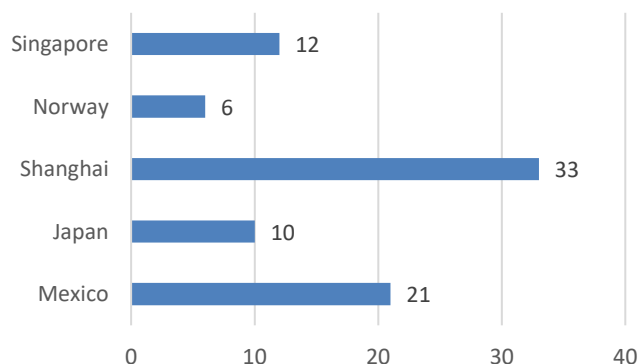
Source*: SABER-Teachers database

Implementation

All teachers have the right to professional development and collaborative learning. Although the specific content of the programme had not yet been released by 2015, the government committed an increase of almost 900 per cent to the professional development budget.

Goal 8: Motivating teachers to perform

Advanced●●●●

Mechanisms that adequately motivate teachers enable school systems to show their seriousness in achieving education goals, making a teaching career attractive to competent individuals and rewarding good performance while ensuring accountability.

SABER-Teachers considers three policy levers that school systems can use to reach Goal 8: (1) initiatives that link career opportunities to teachers' performance; (2) mechanisms that hold teachers accountable; and (3) performance-based compensation.

Policy

(1) Promotion opportunities in Mexico are linked to performance. To ensure teachers are capable before granting them long-term contracts, authorities need both a probation period upon initial hires and the right not to offer long-term contracts to teachers who do not perform during the probation period. In Mexico, under the teaching policies defined in the context of the Educational Reform of 2013, novel teachers have a two-year induction period during which they receive mentoring and coaching. After the trial period is over, teacher candidates participate in the Diagnostic Evaluation which consists of: (i) the principal's report of compliance with professional responsibilities; (ii) a knowledge and competency test to assess their teaching competencies; and (iii) a questionnaire on characteristics and training needs for teachers and technical advisors. Teachers who pass this evaluation are offered a four-year contract. Those who fail can be dismissed from the profession.

Similarly, following the new reform efforts, promotion opportunities are also linked to performance. Only teachers with good or outstanding performance in the teacher evaluation are eligible for the promotion programme of the professional teaching service every four years (Table 4). In this sense, promotions depend on

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both the results of performance evaluations and the submission of complementary examinations based on instruments defined by the INEE. Teachers who wish to apply for promotions to become principals and technical pedagogical advisors have to participate in the promotion contest, which includes: (i) a standardized national test that assesses knowledge and abilities of the teaching practice; and (ii) a national exam of cognitive abilities and ethical-professional responsibilities. This contest process is also open to the general public. Candidates who succeed enter a priority list and are eligible for their preferred positions as principals, supervisors, and technical pedagogical advisors based on the contest's results.

(2) By policy, Mexican teachers can be dismissed under certain circumstances. Requiring teachers to meet certain standards in order to remain in the profession can facilitate the removal of ineffective and/or dangerous teachers. SABER-Teachers measures whether teachers may be dismissed for misconduct, child abuse, absenteeism or poor performance. In Mexico, a teacher may be dismissed in cases of abuse (e.g. sexual, physical, or any other form of abuse against his/her students), for unjustified absences and for refusing to participate in mandatory evaluations (DOF, 2013 and 2014).

(3) Incentives exist for teachers who perform well in teacher evaluations. To align teacher incentives, systems that are most effective at motivating teachers provide incentives to perform well (e.g. performance bonuses). Mexico also offers a horizontal promotion programme based on incentives. Teachers who participate in this programme are eligible to receive incentives that may become permanent, impacting on benefits such as retirement, paid leave and holiday bonus. This type of promotion does not result in a change of responsibilities, but it stimulates continuity and excellence in teaching.

Table 4. Requirements to remain in the profession, primary and secondary school teachers

	Mexico	Japan	Shanghai	Singapore	South Korea
Professional development	✓	✓	✓	✓	✓
Performance evaluation	✓		✓	✓	✓

Source*:* SABER-Teachers database

Implementation

In 2015, 89 per cent of teachers who participated in the performance evaluation process (134,140 teachers) were considered proficient. A group of 8,153 teachers obtained the highest scores and received monetary compensation. Over half of the teachers (59.8 per cent) met the standards of the evaluation (SEP, 2016*a*), while 25,586 (16.9 per cent) were promoted to principal in 2015 through the promotion contest.

Similarly, nearly 7.9 per cent of teachers received an 'outstanding score' in the promotion programme based on incentives, and they will receive a salary increase equivalent to 35 per cent (SEP, 2016*d*).

Policy Implications

This SABER country report has offered a snapshot of Mexico's key teacher policies and how they compare with those of top global performers in education. This section presents some policy implications for the further improvement of the teacher policy framework. These recommended measures are derived from the above analysis and interviews conducted in Mexico. Policy suggestions are provided for key priority areas.

Mexico's overly ambitious education system reform has resulted in more stringent requirements to enter and remain in the teaching profession, including the introduction of teacher evaluations, and the advancement of merit-based teacher assignments and promotions. These policies can be revised and adjusted, but overall they are evidence-based and are expected to increase student learning outcomes. A general recommendation for the system is to build the necessary support from relevant stakeholders (e.g. teachers, parents and the community), and to foster political consensus to ensure sustainability over time and to achieve the reform's consolidation.

Preparing teachers with useful training and experience (Goal 3)

According to the INEE, evidence indicates that initial training is lacking in quality and that more aggressive policies and actions are needed to strengthen Normal Schools and other teacher training institutions. The institute has made five specific recommendations:

- Strengthen the academic organization of Normal Schools.
- Develop a common set of standards to be met by all initial training institutions.
- Create a national information system that includes all teachers.
- Use the wealth of information and data collected through teacher evaluations to improve pre-service training in Normal Schools, with a particular focus on subject knowledge and practical pedagogical skills that can be used in the classroom.
- Evaluate and pilot teacher initial education programmes to improve their quality.

Matching teachers' skills with students' needs (Goal 4)

Disparities exist in terms of both access and achievement for students of different ethnicity, geographic origin, and socioeconomic level. In fact, out-of-school children remain a relevant challenge for Mexico; indigenous populations are the most affected. Policy recommendations that tackle this challenge may include:

- Revise incentives for teachers who serve vulnerable students to make sure they attract qualified and effective teachers to work in schools located in indigenous communities and in rural and isolated areas. Additional incentives could include: housing benefits, higher bonuses and subsidized education.
- Identify critical shortage subjects and provide incentives for teachers who teach these subjects. These incentives may include: higher salaries, bonuses and subsidized education. Additional professional development should be made available for teachers who work in hard-to-staff schools to support them in developing additional skills to teach vulnerable students.
- Revise the teacher assignment policy to assign high-performing teachers in teacher evaluations to the most vulnerable schools.

Monitoring teaching and learning (Goal 6)

Different mechanisms exist to monitor teaching and learning in Mexico, including teacher evaluations to enter and advance in the teaching profession, and student learning assessments applied to students at different grade levels. However, these mechanisms can still be improved and their results better used to improve teaching. Policy recommendations include:

- Complement instruments used for teacher evaluations with classroom observation tools.
- Use the results of student learning assessments and teacher evaluations systematically to improve pre-service training and teaching practice.

Supporting teachers to improve instruction (Goal 7)

The Secretariat of Public Education has acknowledged the diversity of teachers in terms of academic backgrounds, experience and performance. Hence, it proposes that all professional development opportunities must contribute towards increasing student learning and addressing the challenges that teachers face in the classroom. Further diversification of professional development opportunities can increase teachers' professional autonomy and practice (SEP, 2016*c*). Policy implications include:

- Improve the coordination between national and sub-national authorities to make sure that professional development opportunities are available to respond to teachers' individual needs, as informed by performance evaluation results and contexts of practice.
- Strengthen support for school-based collaborative learning to improve pedagogical practice and the school environment.
- Design and implement a national strategy for professional development.
- Link the results of teacher evaluations and student learning assessments with the supply of professional development opportunities.

SYSTEMS APPROACH FOR BETTER EDUCATION RESULTS

Acknowledgements

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Annex 1: SABER-Teachers Ratings

The SABER-Teachers team has identified policy levers (actions that governments can take) and indicators (that measure 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 following policy levers and indicators:

Table A1.1 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. Are teachers' official 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?

In the country report, each goal is defined in the first paragraph of the section relating to that goal. Policy levers for achieving that goal are identified in the second paragraph. The remaining text in each section provides details about the indicators that measure each of the levers.

Using the policy levers and indicators, the SABER-Teachers tool evaluates the performance of an education system on each of the eight teacher policy goals using a four-tiered scale (latent, emerging, established and advanced) that describes the extent to which the system has established teacher policies associated with improved student outcomes.

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

- Advanced systems, rated on a particular policy goal, have established multiple policies conducive to learning for each policy lever used to achieve that goal.

- Established systems have at least one policy and/or law in place that uses those policy levers.
- Emerging systems have only some appropriate policies in place to achieve the policy goal.
- Latent systems have no or few teacher policies.

See Vegas et al. (2012) for more details about these definitions as well as a detailed review of the policy levers and indicators used by SABER-Teachers.

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 stakeholders 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 geared toward ensuring that all children and youth learn.

This report focuses specifically on policies in the area of teachers. It was produced by the International Task Force on Teachers for Education 2030, hosted within UNESCO, with support from staff of the World Bank Group.

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