



Policy Goals

1. Setting Clear Expectations for Teachers

There are clear expectations for what students should learn and what teachers are supposed to do. However, there are not clear guidelines regarding the proportion of school time dedicated to instructional improvement.

Status

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2. Attracting the Best into Teaching

Entry requirements, teacher pay, and working conditions may not be appealing for talented candidates, signaling teaching as a low-status profession. Teacher pay was reformed in 2008 and has been increasing since, though it is still not appealing for talented candidates.

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3. Preparing Teachers with Useful Training and Experience

Current initial teacher education programs may not be best suited to ensure good-quality teachers. Teachers-in-training have the opportunity to develop practical teaching skills, but the amount of required practical training may be insufficient.

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4. Matching Teachers' Skills with Students' Needs

There are no official systems in place to address teacher shortages in hard-to-staff schools, or to attract teachers in critical-shortage subjects, but some shortages have been partially addressed.

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5. Leading Teachers with Strong Principals

Principals are expected to monitor teacher performance and provide support to teachers to improve instructional practice, and their performance is rewarded. At present, there are no specific training requirements to ensure that principals have the necessary skills to act as instructional leaders rather than school administrators, but a mentoring program is proposed under the new draft law.

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6. Monitoring Teaching and Learning

There are systems in place to assess student learning in order to inform policy but not teaching. Teacher performance is evaluated annually, but the criteria used might not be capturing effective teaching.

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7. Supporting Teachers to Improve Instruction

There are opportunities for teacher professional development, but requirements for length and frequency are not specified and teachers pay for some of their own professional development activities.

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8. Motivating Teachers to Perform

There are mechanisms in place to hold teachers accountable. Career opportunities and salaries are linked to teacher performance via an annual evaluation, but the current evaluation system is not necessarily based on criteria that capture effective teaching.

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Introduction

Bulgaria implemented sweeping decentralization and efficiency-focused reforms in basic education in 2007 and 2008. The education system adjusted to the negative demographic trends by optimizing the network of schools (closing and merging schools), introducing per-capita based financing and delegating significant financial and decision-making autonomy to school principals. This policy reform package produced a number of benefits for the education sector; it accrued savings of over 100 million BGN and increased wages by 46 percent and reallocation of resources for capital investment (World Bank 2010). While initially school closures negatively affected the access to education among linguistic minority groups living in rural and remote areas, a set of measures (including free transportation to neighboring hub schools, improved school environment and facilities, designation of “protected schools” in remote areas that cannot be closed) tamed the negative side effects from the school network optimization.

Pre-university education in Bulgaria is compulsory for ages five to sixteen and is presently characterized by high participation and enrollment rates (ranging from 82 percent for pre-school education to 95 percent for primary and 82 percent for secondary education) (National Statistical Institute 2013). Public schools serve the majority of Bulgarian students – less than 1 percent of students attend private schools. Bulgaria’s public school system consists of 2,476 schools serving children in grades one through twelve. During the 2012-2013 school year, there were 51,711 teachers and 746,702 students in the public school system. The average student teacher ratio in Bulgaria is 14.44:1, varying considerably across different types of schools and types of communities (from 11:1 in rural secondary schools to 19: 1 in urban primary schools).

Despite the government’s impressive achievements in terms of spending efficiency and high enrollment, lingering concerns remain about the quality and equity of the education system. The country has seen a negative trend in student learning outcomes as measured by international assessments. Between 2001 and 2011, Bulgaria fell from 4th to 22nd place on the PIRLS reading assessment of 4th-graders (PIRLS 2001, 2011). Between 2001 and 2009, Bulgaria fell from 32nd to 46th place

(composite score) on the PISA assessment measuring reading, mathematical, and scientific literacy of 15-year-olds (9th-graders). Approximately 41 percent of students are functionally illiterate as defined by OECD standards (OECD 2009). Between 1999 and 2009, Bulgaria fell from 20th to 28th place on the ICCS international assessment measuring the civic literacy of 8th-graders. Student performance varies significantly between and within schools, which is partly explained by the combination of free school choice, early test-based selection of students into high- and low-performing schools and early tracking into general and vocational streams (after 7th grade).

The negative trends in learning outcomes have refocused the attention of both policy makers and the public from spending efficiency and network optimization to education effectiveness. Over the past three years, the Government has held extensive discussions with professional and broader stakeholders on developing an entirely new legal framework for pre-university education. The government recently completed a draft of a new Law on Preschool and School Education envisions measures to strengthen the student assessment system and improve the accountability framework for schools by increasing parental involvement in schools’ oversight and decision making. The law also introduces more rigorous requirements for school principals and strengthens the inspection and evaluation frameworks. In parallel, the learning standards, the curriculum and textbooks have been subjected to revisions. Less prominent in the public mind but no less important are the quality of teaching and school leadership, two factors which are known to affect learning outcomes the most.

At the request of the Government of Bulgaria, the World Bank has implemented its newly developed tool for assessment and benchmarking of policies and programs affecting teacher’s effectiveness - SABER Teachers. The key findings and policy options outlined in the present report are intended to inform the finalization of the new Draft Law and the development of the bylaws regulating teachers’ policies in Bulgaria.

Overview of SABER-Teachers

There is increasing 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 & Woessmann 2007, 2009; Pritchett & Viarengo 2009; Campante & Glaeser 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 (Hanushek & Rivkin 2010; Rivkin et al. 2005; Nye et al. 2004; Rockoff 2004; Park & Hannum 2001; Sanders & Rivers 1996). However, achieving the right teacher policies to ensure that every classroom has a motivated, supported, and competent teacher remains a challenge, because 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 very different impacts depending on the context and other education policies in place.

A new 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' policy domains, analyzes it to identify common challenges and promising solutions, and makes it widely available to inform countries' decisions on where and how to invest in order to improve education quality.

SABER-Teachers collects data on ten core teacher policy areas to offer a comprehensive descriptive overview of the teacher policies that are in place in each participating education system (see Box 1). Data are collected in each participating education system by a specialized consultant using a questionnaire that ensures 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 where interested stakeholders can access detailed information organized along relevant categories that describe how different education systems manage their teacher force, as well as copies of supporting documents. The full database is available at the SABER-Teacher 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 analyzes the information collected to assess the extent to which the teacher policies of an education system are aligned with those policies that the research evidence to date has shown 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 8 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 (see Figure 1).

Figure 1: 8 Teacher Policy Goals



The 8 Teacher Policy Goals are functions that all high-performing education systems fulfill 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 evidence of research studies on teacher policies, and the analysis of policies of top-performing and rapidly-improving education systems. Three criteria were used to identify them: teacher policy goals had to be (i) linked to student performance through empirical evidence, (ii) a priority for resource allocation, and (iii) actionable, that is, actions governments can take to improve education policy. The eight teacher policy goals exclude other objectives that countries might want to pursue to increase the effectiveness of their teachers, but on which there is to date insufficient empirical evidence to make specific policy recommendations.

By classifying countries according to their performance on each of the 8 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 (which measure 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), which describes the extent to which a given education system has in place teacher policies that are known to be 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 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 on policy implementation. SABER-Teachers analyzes the teacher policies formally adopted by education systems. However, policies "on the ground", that is, 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 of the organizations in charge of implementing them, 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 Bulgaria. It describes Bulgaria's performance in each of the 8 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 detailed descriptive information on Bulgaria's and other education systems' teacher policies can be found on the SABER-Teachers website.

Bulgaria's teacher policy system results

Goal 1: Setting clear expectations for teachers

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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 there is coherence among different key aspects of the teaching profession, such as teacher initial education, professional development, and teacher appraisal.

SABER-Teachers considers two policy levers 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; (2) useful guidance on teachers' use of time to be able to improve instruction at the school level.

(1) In Bulgaria, there are expectations for what students are expected to learn and for what teachers are supposed to do. The Ministry of Education, Youth and

Science (MOMN)¹ is responsible for setting education goals and controlling the national curriculum. There are officially stipulated requirements for the minimum education, curriculum, and skills students must attain in every subject by every grade. Additionally, schools have the autonomy by regulation to choose individual school specializations and elective classes.

The tasks teachers are expected to carry out are officially stipulated. Teacher tasks go beyond classroom teaching. There are essentially three types of teacher tasks: basic tasks, additional tasks to be eligible for an annual salary bonus, and responsibilities related to the labor code. Firstly, basic tasks include activities such as participating in the Pedagogical Committee and implementing its decisions, being a class teacher, leading extra curriculum activities, and grading external assessments. Secondly, additional tasks from the list of criteria that make teachers eligible for an annual bonus include activities related to teaching, such as using innovative teaching methods. Third, the responsibilities related to the labor code and discipline focus mostly on expectations of teachers' work-place behavior.

While there are clearly defined teacher tasks, there is no clear statement in the law as to what percentage of time teachers should allocate to any of these tasks (except for actual teaching in the classroom). Furthermore, there are no official guidelines or standards as to what good versus poor performance looks like. The principal ultimately determines whether teachers have fulfilled their stipulated tasks and obligations. The Regional Inspectorate of Education (RIO) ensures the school is compliant with all regulations, but there are no safeguards to prevent subjective decision-making on the part of the principal.

(2) Guidance on teachers' use of time could focus more on ensuring that expectations are set in a way as to improve instruction. Teachers' working time in Bulgaria is officially defined as the overall number of working hours (as opposed to merely counting contact time with

students or hours spent at the school). Global experience suggests this definition may be conducive to learning, because it recognizes that teachers normally need to devote some time to non-teaching tasks, such as lesson planning, the analysis of student work, and professional development, as well as administrative tasks.

However, non-teaching tasks related to instructional improvement are not officially a required part of teachers' basic tasks in Bulgaria. Such tasks may include mentoring peers, collaborating on school plans, or participating in school evaluation (Figure 2). In practice, it is possible that teachers take part in such activities and some of them officially count toward their annual salary bonus calculation. Given overall concerns about the practicability and the effectiveness of the annual performance bonus framework as set up currently (See Goal 6 & 8), it is unclear what percentage of teachers devote time to such activities, how often they actually do so, and how this varies from school to school.

In contrast, successful education systems such as 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 as well as mentoring and professional development (Darling Hammond & Rothman 2011, Darling-Hammond 2010, Levin 2008). In addition, these systems tend to devote a smaller share of teachers' time to actual contact time with students than other systems do, and a larger share to teacher 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 this type of activities, while Ontario currently devotes 30 percent (Darling Hammond & Rothman 2011).

¹ In June 2013 the Ministry of Education, Youth and Science was renamed to the Ministry of Education and Science (MON)

and the structures pertaining to youth were consolidated into another ministry, the Ministry of Youth and Sports.

Figure 2. Teachers' official tasks related to school improvement

	Bulgaria	Japan	Shanghai	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

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The structure and characteristics of the teaching career can make it more or less attractive for talented individuals to decide to become teachers. Talented people may be more inclined to become teachers if they see that entry requirements are on par with those of well-regarded professions, if compensation and working conditions are adequate, and if there are attractive career opportunities for them to develop as professionals.

SABER-Teachers considers four policy levers 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 Bulgaria, teachers are required to have at least a Bachelor's degree in order to be qualified to teach.

Primary and secondary education teachers in Bulgaria receive their initial teacher training in courses taken after 12 years of schooling. Formal requirements to become a primary or secondary school teacher are similar to those in top-performing international education systems. Teachers in Bulgaria are required to have at least a minimum amount of practical professional experience and to pass a practical assessment in the form of a sample lesson. There are also written exams as part of

individual course programs, but there is not one officially mandated final written exam in pedagogical programs.

In Bulgaria, both concurrent and consecutive models for teacher training exist. Concurrent programs, programs that teach subject knowledge and pedagogic skills relatively simultaneously, are one pathway to enter the teaching profession. A key characteristic of this model is that, on entering an education program, an entrant has already made a decision to become a teacher. The basic requirement to become a teacher is to have a Bachelor's or Master's degree from a concurrent program.

There is also a consecutive model for initial teacher training. Consecutive programs such as the one in Bulgaria allow individuals who are in the process of acquiring or have a Bachelor's degree in a discipline other than education to gain a teaching certificate after twelve months of additional study at university.

According to official policy, eligibility to teach is offered only by universities. To qualify as a teacher, a candidate must undergo a course of study that includes at least 60 hours pedagogy, 45 hours psychology, 15 hours IT learning methods, and 60 hours of educational methodology. A practical part of the degree program is also obligatory, and it must include 30 hours visiting classes, 45 teaching practice, 75 hours pre-graduation teaching practice. All teachers in training pursuing a teaching certificate must pass an obligatory examination in the form of a sample lesson in front of an examination commission. It is important to note that there is no evidence these programs are selective, or that one needs to demonstrate any specific competencies, rather than credentials, in order to gain admission.

Entry requirements in Bulgaria may help attract a large potential pool of candidates for teaching, because there is more than one pathway to enter the teaching profession. However, the requirements to enter such programs are not rigorous. There are no minimum GPA requirements to enroll in teacher training. At the same time, regardless of the model (concurrent or consecutive), to become a teacher one needs to have completed a degree in a subject matter that is taught at school. Thus, people with highly selective degrees such as economics, law or political science have no clear path to entering teaching. Typically, they can only do that after longer qualification programs (taking 2-3

years). Data provided in Table 1 illustrates that highly accomplished high school graduates rarely apply for admissions to pedagogy programs.

Table 1. Pedagogy and Law Program Entry Requirements (Bachelor's Degree)²

Major:	Law	General Pedagogy	Subject-Specific Pedagogy
Number of universities offering BA degrees	3	8	9
High-school GPA of admitted students	5.33 / 6.00	4.85 / 6.00	4.72 / 6.00
Prestige among employers (score)	13	8	7
Prestige among the public (score)	23	12	11
Unemployment rate of graduates	2.7%	4.2%	5.1%
Graduates getting a job in the field (score)	29	19	24

Source: Bulgarian University Ranking System

(2) Teacher pay is not appealing for talented candidates.

The rules for determining teacher salaries are officially defined. Principals and teachers negotiate an individual teacher's salary based on these rules. Base salaries are calculated based on the number of class hours taught as well as additional funding provided for completing a list of extra tasks, such as: teaching additional classes beyond the required minimum, being a class teacher (supervisor), teaching a regular subject in a foreign language and helping grade external student assessments. Since the 2008 change in school financing, school budgets are formulated based on the number of students who attend a school. As a result, teachers who teach in larger schools may receive a higher base salary. By law, all teachers receive an annual extra bonus for work attire (about 300 BGN per year).

In 2008, a pay scale that differentiates teacher salaries was introduced and there was a substantial increase to

teachers' salaries. Since then, teacher salaries have been going up by about 10% annually. The new pay scale links teachers' individual salaries to their professional qualification rank. However, teacher pay remains low relative to pay in other similarly skilled professions. As of January 2013 the minimum teacher salary was 500 BGN (approximately 330 USD), a relatively low wage. For comparison, the starting salary of a public servant with an Master's degree is approximately 700-800 BGN (approximately 460-530 USD), and the public servant has many more options for salary increases. In the private sector, the minimum salary for a similarly skilled qualified individual with a Master's starts around 1000 BGN (approximately 660 USD) and could reach a level that is several times higher than the highest possible teacher salary. Private schools must comply with the same minimum-salary rules, but they tend to have bigger budgets and can afford to pay teachers more than public school.³

In 2008, the government introduced an annual salary bonus for good performance. This bonus allocates 3-4% of the schools' annual salary fund to teachers who score high on the annual internal evaluation (introduced as a part of the reform). Evidence from interviews suggests that the bonus is not a significant inducement for teachers. It represents a relatively negligible percentage of the salary; its calculation is focused on process and outputs, not outcomes. It is not tied to support and professional development opportunities. The process also leaves room for subjectivity in evaluations.

Overall, the salary structure including the pay scale and the bonus is not attractive for highly qualified graduates.

(3) Working conditions may be appealing enough 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

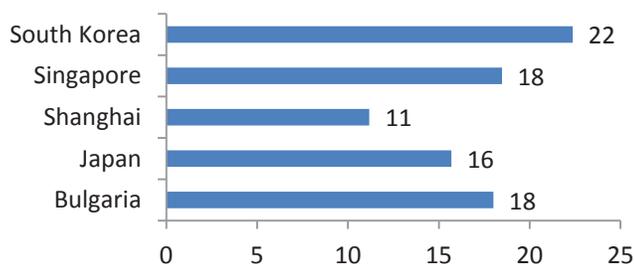
² The information in Table 1 is based on data from the Bulgarian University Ranking System. The "Prestige" ranking criterion is based on survey results with a representative sample of tertiary students. The survey is an integral part of the ranking methodology.

³ There are no official data on private schools salaries, hence differences between teachers' salaries in public and private schools is based on anecdotal evidence and feedback from interviews.

discouraged from choosing to become teachers if working conditions are too poor. In Bulgaria, there are national standards for infrastructure, hygiene, and sanitation in schools. The Law for National Education and the Manual for Application of the Law of School Education set minimum infrastructure, hygiene, sanitation, and equipment standards for schools. Before the beginning of each school year, schools are inspected to determine whether they comply with hygiene, safety, and infrastructure standards, and they are not allowed to open for the new school year unless they pass those inspections.

Student-teacher ratios, which are another indicator of teacher working conditions, are similar to those in high-performing international education systems. The primary school student-teacher ratio is 18:1, and the secondary school ratio is 13:1.

Figure 3. Student-teacher ratio, primary school



Source: SABER-Teachers data

(4) Opportunities for career advancement may be appealing enough to help attract talented individuals to the teaching profession. Teachers in most education systems are offered opportunities for promotion to principal positions at some point in their careers. In addition to these “vertical” promotions, most high-performing education systems offer teachers the possibility of “horizontal” promotions, to academic positions that allow them to grow professionally as teachers and yet remain closely connected to instruction, instead of moving up to managerial positions (OECD 2012, Darling-Hammond 2010).

Policies in Bulgaria offer various opportunities for career advancement to teachers. Teachers have the option of applying to either school administration posts (such as school principals) or academic leadership positions. Promotion opportunities in Bulgaria are not officially linked to teacher performance. This link between

promotion decisions and performance is another way of improving career opportunities in the teaching profession for attractive candidates. At present, the main factor used for promotion decisions is years of teaching experience, and principals have the autonomy to choose selection criteria when there are more qualified applications for a certain position (e.g. for head teacher). Performance may be taken into account, but the link between performance and promotions is not officially mandated.

Goal 3: Preparing teachers with useful training and experience

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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 in order to be successful in the classroom. In addition, preparation puts all teachers on an equal footing, giving them a common framework to improve their practice.

SABER-Teachers considers two policy levers school systems can use to reach this goal: (1) minimum standards for pre-service training programs; (2) required classroom experience for all teachers.

(1) Teacher initial education may not be providing prospective teachers with the necessary practical knowledge and skills to be successful in the classroom. Virtually all high-performing countries require that teachers have an educational level equivalent to ISCED 5A (a Bachelor’s degree), and some systems, such as Finland, require in addition a research-based master’s degree (OECD 2011). As mentioned earlier, primary school teachers in Bulgaria go through their teacher initial education at the ISCED 5A level, completing a Bachelor’s degree course with a practical component.

(2) Practical classroom experience requirements for teachers-in-training could be strengthened, particularly for secondary school teachers. Practical experience is an important factor in teaching quality. The more teachers try out 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, and some of these systems provide mentoring and support during the first and even second year on the job (Darling-Hammond 2010, Ingersoll 2007). In Bulgaria, teachers-in-training acquire less than three months of classroom experience (240 hours for primary school teachers and 120 hours for secondary school teachers).

In Bulgaria, novice teachers are not required to participate in induction programs or mentoring programs, even though senior teachers are required to provide mentoring. In high-performing systems, programs aimed at facilitating new teachers' transition into teaching for both primary and secondary school teachers are usually longer than 7 months. These programs have the potential to make teachers more effective in the classroom and reduce teacher turnover.

Figure 4. Required classroom experience, primary school teachers

	Bulgaria	Japan	Shanghai	Singapore	South Korea
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

Established ●●●○

Ensuring that teachers work in schools where their skills are most needed is important for equity and efficiency. First, it is a way of ensuring teachers are distributed as efficiently as possible, making sure that there are no shortages of qualified teachers at any given grade, education level, or subject. Second, it is a means of

ensuring all students in a school system have an equal opportunity to learn. Without purposeful allocation systems, it is likely that teachers will gravitate towards schools serving better-off students or located in more desirable areas, deepening inequalities in the system.

SABER-Teachers considers two policy levers 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 teach in critical shortage areas.

(1) There are no official policies or systematic measures undertaken to prevent or address teacher shortages in hard-to-staff schools. Attracting effective teachers to work in hard-to-staff schools (schools that are in disadvantaged locations or serve underprivileged populations) is a challenge for many countries, and often requires a specific set of incentives.

In Bulgaria, this is partially addressed with the “protected schools” policy. A protected school is a school which has too few students to receive enough funding to sustain itself (in Bulgaria schools receive funding based on the number of students that attend them), but if it were to be closed, its students would not be able to attend another school. Those schools are determined in an official list issued by the Ministry of Education and receive extra funds to ensure budget sustainability, including teacher salary funding. As these schools tend to be geographically remote and less accessible, teachers there get up to 80% of their travel expenses covered. This is one ad-hoc measure that could be construed as an incentive to attract teachers to a subset of hard-to-staff schools, namely the “protected schools.” However, since those schools have relatively fewer students, there are few openings for new teachers. The policy focuses more on ensuring the schools are not closed because of a lack of funding (hence the name “protected” schools) rather than attracting effective teachers to these schools. Usually these schools need teachers who are qualified to teach a mix of subjects, because there are a small number of students and the regular teacher work-load could not be fulfilled unless the teacher teaches many different subjects. Universities have naturally adapted to this and offer suitable qualifications, but this is not reflected in the law.

Evidence from interviews further shows that there are many other hard-to-staff schools beyond the list of

“protected” schools that struggle to find teachers and fill in vacancies. There has been no official study or data to determine what percentage of schools are hard-to-staff.

(2) Bulgaria has identified one critical-shortage subject area, but policy does not systematically identify or address all critical shortage areas. Regular subjects taught in foreign languages have been officially identified as a critical-shortage area. The law states that the base salary of teachers who teach a regular subject in a foreign language is higher. Schools annually report information about shortages to the regional inspectorates, but there is no regulation or practice that this information is aggregated, analyzed, or acted upon at the national or regional level and on a regular (annual) basis.

Overall, existing policies do not facilitate efficient teacher deployment, especially as it pertains to hard-to-staff schools and critical shortage subjects. Hard-to-staff schools predominantly employ teachers who have served their respective communities for many years, and critical shortage subjects (like foreign languages and mathematics) remain a significant challenge for schools in small towns and rural areas.

Figure 5. Incentives for teachers to teach in hard-to-staff schools

	Bulgaria	Japan	Shanghai	Singapore	South Korea
Promotion			✓		✓
Higher basic salary in hard-to-staff schools	✓	✓			
Monetary bonus		✓	✓		
Subsidized education			✓		
Housing support		✓			✓

Source: SABER-Teachers data. Note: Singapore has no specific incentives to attract qualified teachers to hard-to-staff schools, but it does have a centrally-managed teacher deployment system that ensures an equitable and efficient distribution of teachers.

Goal 5: Leading teachers with strong principals

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

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

(1) In Bulgaria, there are training programs to support the professional development of principals, mainly in the area of school administration. However, it is not required that principals take part in such activities prior to assuming the principal role or during their tenure as principals. The new Draft Law introduces a principal mentorship program, stipulating an official track to becoming an authorized mentor. There are different training courses available to principals, including courses that cover institutional leadership topics such as internal evaluations or leading teacher teams (part of the offerings of The National Institute for Training and Qualification in the Education System). However, the professional development of principals is not regulated, and school leaders enroll in such courses on a voluntary basis. The only required training for principals focuses on managing a delegated budget.

Research from high-performing education systems suggests principals can develop leadership skills through supported work experience or through specific training courses, and recent research in Bulgaria suggests this might be useful since teachers seeking to move into school director roles often lack necessary skills (Attfield 2011). High-performing systems such as Japan, South Korea, Shanghai, and Singapore require the participation of applicants to principal positions in specific coursework and/or a specialized internship or mentoring program aimed at developing essential leadership skills (OECD, 2012; Darling-Hammond 2010).

To become a school principal in Bulgaria, an applicant must have a teaching certificate and 3 years of teaching experience. Principals are appointed through an open competitive process that includes a written exam on relevant legislation. There are some training courses

available for newly appointed principals, but as mentioned above they are not mandatory. There are currently no specific training mechanisms to ensure that applicants to principal positions can develop the necessary skills to act as instructional leaders, such as specific coursework or participation in a mentoring or internship program.

Legislation states that principal performance is assessed every year for the calculation of an annual bonus payment. The bonus payment is calculated based on a list of principal activities and is carried out by a committee made up of experts from the Regional Inspectorates of Education. The evaluation focuses on how the principal manages the general organization of instruction, school curricula plans, human resources, and teacher qualifications. The Draft Law proposes that principals continue to be assessed every year and that an external evaluation be conducted every 5 years by a special National Inspectorate.

(2) Principals in Bulgaria are officially required to monitor teacher performance and to provide support and guidance to teachers for the improvement of instructional practice. However, practice shows that they rarely focus on the qualitative aspects of running the school organization (such as establishing a strong achievement-focused culture and monitoring student achievement) due to their significant focus on administrative tasks. Once education systems get talented candidates to become principals, they need to structure their time to focus on improving instruction (OECD 2012, Barber & Mourshed 2007). High-performing education systems such as 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 & Rothman 2011).

In Bulgaria, principals are expected to hire and dismiss teachers, assess teachers’ performance, evaluate the overall school’s performance, manage the schools budget, represent the school, respond to subnational and local authorities, and maintain student discipline. Many of the tasks that are expected from principals in

Bulgaria are aligned with instructional leadership tasks that research suggests are associated with high student performance, though their administrative load may be especially burdensome and may detract from their ability to manage teachers effectively.

Figure 6. Mechanisms to support the development of principals’ leadership skills

	Bulgaria	Japan	Shanghai	Singapore	South Korea
Courses or other training requirements			✓	✓	✓
Mentoring or internship program		✓		✓	

Source: SABER-Teachers data

Goal 6: Monitoring teaching and learning

Emerging ●●○○

Assessing how well teachers are teaching and whether students are learning or not is essential to devise strategies for improving teaching and learning. First, identifying low-performing teachers and students is critical for education systems to be able to provide struggling classrooms with adequate support to improve. Second, teacher and student evaluation also helps identify good practices which can be shared across the system to improve school performance.

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

(1) In Bulgaria, there are systems in place to assess student learning in order to inform policy but not teaching. All high-performing education systems ensure that there is enough student data to inform teaching and policy, but they do so in very different ways. Regardless of the mechanism they decide to follow, high-performing

systems ensure that three main functions are fulfilled: (1) There is a system to collect relevant and complete data on student achievement regularly; (2) There is a mechanism for public authorities to have access to these data so that they can use it to inform policy; and (3) There is a mechanism to feed these data and relevant analyses back to the school level, so that teachers can use it to inform the improvement of instructional practice. In Bulgaria, principals receive annual assessment data that compare their school's performance with regional averages. National data is available upon request, and national assessments have been standardized. However, there are concerns that the scoring scale and the relative proportion of different-type assessment questions change every year, which may render year-on-year comparisons and trend analysis inaccurate. Moreover, school principals rarely use the results of these assessments to implement changes in instructional practices or guide teacher professional development.

In Bulgaria, there are obligatory external student assessments after completion of grades four, seven, and twelve. After grade four, there is the National Standard Assessment Exam for External Evaluation of Students' Achievements. This exam is administered again after grade seven along with another exam, the National Standard Admission Exam. Student outcomes from this combination of exams determine their secondary school track—whether or not they gain admission to selective, comprehensive high schools or attend vocational training schools. The final exam, the National Matriculation Exam after twelfth grade, takes place at the end of a student's secondary school career, and a student cannot receive a high school diploma unless he or she passes this exam.

Bulgaria measures student academic achievement through the above-mentioned national assessment at the end of each education stage (elementary, basic and secondary education), and it also participates regularly in PISA and PIRLS. However, the results from national assessments are not used to evaluate individual teacher effectiveness and performance. They are used to evaluate individual students and overall school performance. International assessments in turn are only used for country-level analysis.

(2) There is a system in place to evaluate teacher performance, but its effectiveness may be limited. In

Bulgaria, a formal internal evaluation is conducted once a year in order to determine eligibility for the annual bonus payment. However, these evaluations primarily focus on process (e.g., points assigned of the teacher works with hard-to-integrate students) and not on results (e.g., gains in student achievement). They assess the extent to which a teacher complies with a set of formal requirements established in the regulations that may not necessarily measure effective teaching and correlate with student performance. There are no external evaluations of individual teacher performance.

The standards for evaluation are broadly defined, which may be seen as an opportunity by skilled principals and as a challenge by others. While there are official regulations covering teacher evaluations, these are focused exclusively on details pertaining to procedure. There has not been a concerted effort to provide principals with training and to improve their ability to execute effective teacher evaluation based in objectively measured student learning and achievement. Experts interviewed for SABER-Teachers point out that the criteria focus on process and not on results.

(3) There are structures in place to monitor teacher performance, but the criteria used to evaluate it do not give sufficient weight to student achievement and learning outcomes. Research suggests that no single method of evaluating teacher performance is failsafe. Most high-performing systems conduct teacher evaluations using a multiplicity of mechanisms of data collection and varied criteria for assessment. A comprehensive teacher evaluation framework that combines student results, teachers' portfolios, classroom observations and feedback from students/parents is currently lacking in Bulgaria. International experience and research on the topic both suggest that none of these approaches taken separately can produce a balanced and objective evaluation of teacher performance.

In Bulgaria, school principals are in charge of appraising teacher performance and colleagues participate in internal evaluations. Teacher appraisal takes place annually, and the list of criteria combines both tasks officially stipulated in the law and tasks chosen at the school level. Criteria taken into account during teacher appraisal include the use of interactive teaching

methods, overall work with students, working with parents and implementation of school projects.

Research has shown that evaluations combining multiple methods and sources of information (such as student academic achievement, classroom observations and student survey results) might be more effective. The data from the standardized national student assessments could, in theory, be used as a proxy for student achievement. However, presently not all subjects are tested, and national assessments are not administered at the end of each grade. The framework therefore appears better suited for evaluating school rather than teacher performance. Furthermore, there is evidence that taking a narrow view of student achievement as performance on standardized tests may be detrimental to learning outcomes. Other proxies of student achievement should also be included in the teacher evaluation framework, including performance on teacher-created written assessments, authentic assessments, and others.

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

Figure 7. Criteria to evaluate teacher performance

	Bulgaria	Japan	Shanghai	Singapore	South Korea
Subject matter knowledge		✓		✓	✓
Teaching methods	✓	✓	✓	✓	✓
Student assessment methods		✓	✓	✓	✓
Students' academic achievement			✓		

Source: SABER-Teachers data

Goal 7: Supporting teachers to improve instruction

Emerging ●●○○

Support systems are necessary to help improve instruction at the school level. In order 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 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; (3) making sure teacher professional development is assigned based on perceived needs.

(1) Teachers are required to participate in teacher professional development, but there are no specific requirements as to the duration or intensity of the training. In Bulgaria, participating in professional development is a requisite to stay in the profession as well as a requisite for promotions. In addition, in order to advance from one rank to another in the teacher career ladder, teachers are required to have participated in a number of professional development seminars or workshops according to their rank. The impact and quality of professional development activities are not monitored, but the new Draft Law stipulates that external training programs are accredited.

Teacher professional development is provided but is not always free of charge. According to TALIS data from 2007, 73.4% of Bulgarian teachers received professional development opportunities free of charge to them, 20.5% paid some of the costs, and 6.1% paid the complete cost. According to the regulation, the school must budget an annual amount equal to at least 0,8 percent of the overall teacher salary pool for professional development activities.

(2) Teacher professional development includes activities that have been found by research to be associated with instructional improvement. 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 like Japan and Ontario devote as much as 30 per cent of school time to professional development and instructional improvement activities. Some of these include observation visits to other schools, participation

in teacher or school networks as well as opportunities to engage in research, mentoring or coaching. All such opportunities exist in Bulgaria.

(3) Teacher professional development is not formally assigned based on perceived needs. Assigning professional development to teachers when they score low on performance evaluations is one way of potentially improving instructional practice. Teacher professional development can be targeted to meet the needs of specific teachers.

Figure 8. Types of professional development

	Bulgaria	Japan	Shanghai	Singapore	South Korea
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, make the teaching career attractive to competent individuals, and reward good performance while ensuring accountability.

SABER-Teachers considers three policy levers school systems can use to reach this goal: (1) linking career opportunities to teachers’ performance; (2) having mechanisms to hold teachers accountable; (3) linking teacher compensation to performance.

(1) In Bulgaria promotion opportunities are not linked to performance on the job. There is no official

mandatory probation period for teachers before they are granted open-ended appointments, and official policy does not stipulate that performance on the job factors into whether teachers receive this type of appointment. But although probation periods are not mandatory, there is a practice of having them at the school level, and principals have discretion over whether to renew a teacher’s contract or not.

(2) There are mechanisms in place to hold teachers accountable. Requiring teachers to meet some standards to remain in the teaching profession can facilitate the removal of ineffective teachers. In Bulgaria, teacher performance is evaluated annually, and there are official mechanisms to address cases of misconduct, child abuse, absenteeism and poor performance. In practice, the dismissal rate is low — less than 1 percent per annum, according to unofficial data sources. Interviewees express concerns that principals may find it difficult to dismiss chronically ineffective teachers because of relatively high litigation costs and because courts tend to overturn principals’ decisions.

(3) Teacher compensation is linked to teacher performance. The base salary varies with teacher work load and professional qualification. The annual bonus, however, is determined on the basis of the annual teacher evaluation and thus takes performance into account. The bonus can be an effective tool for improving teacher motivation, assuming that there is a valid and well-accepted system of performance evaluation in place. In Bulgaria, however, there is a widespread perception that teacher evaluation process as currently set up leaves too much room for subjectivity and does not effectively capture performance. Furthermore, the bonus represents a negligible fraction of the salary, and evidence from interviews suggests it fails to act as inducement or a motivator.

Figure 9. Incentives for high performance

	Bulgaria	Japan	Shanghai	Singapore	South Korea
Individual monetary bonus	✓		✓	✓	✓
School-level bonus			✓		✓

Source: SABER-Teachers data

Policy Options

This SABER country report has offered a snapshot of Bulgaria's key teacher policies and how they compare with those of top global performers in education. This section suggests some policy options for further improvement of the teacher policy framework. These recommended measures in all eight policy goals are derived from the above analysis and interviews conducted in Bulgaria. Policy suggestions are listed in order of priority as determined by interviews and inputs from the World Bank country team in Bulgaria.

Goal 1: Setting clear expectations for teachers

There are currently clear expectations for what students should learn and what teachers are supposed to do in Bulgaria. However, the proportion of school time dedicated to instructional improvement is limited. The following measures may help set better expectations for teachers in Bulgaria:

- Define non-teaching tasks related to instructional improvement and ensure that they are an officially required part of teachers' work in Bulgaria. Such tasks may include mentoring peers, collaborating on school plans, and participating in school evaluations. In practice, it is possible that teachers take part in such activities, but it is unclear how many of them and how often they actually do so.
- Set expectations for what percentage of teachers' working time should be dedicated to teaching and what percentage should be used for other necessary activities that may contribute to instructional improvement (including working on lesson plans, having office hours for students, grading assessments and the tasks mentioned above).

Goal 2: Attracting the best into teaching

Identifying, attracting, and retaining the best candidates into teaching is the first teacher policy priority. A large proportion of current teachers will retire in the next decade. The vacancies that open as a result of their

retirement will create an opportunity to develop a comprehensive education strategy that covers new entrants into the profession. Below are some policy suggestions for attracting higher quality candidates into the teaching profession:

- Strengthen selectivity of entry requirements for teacher training programs at universities.
- Ensure teachers get competitive pay, especially at the entry-level.
- Ensure teacher performance is one of the criteria used for teacher promotion and career advancement. For example, vertical and horizontal promotions could be based on merit, not tenure (relax the years of teaching experience requirement for promotions, so that high performing teachers have the opportunity for career advancement).
- Create a mentoring program and make it possible for non-certified teachers-in-training to work in school while still in the process of obtaining their certification (measure stipulated in the new Draft Law) to ensure that top candidates are not deterred or kept out of school by length qualification requirements.
- Remove the existing requirement that candidates must have a university degree in the subject or discipline they are going to teach in school. For example, teacher certification could be obtained after passing a subject-knowledge test to ascertain subject-matter proficiency. Talented candidates from other professions who do not have degrees in the subject may be equally qualified to teach.
- Create and implement a national communication strategy aimed at increasing the prestige of the profession. This could include measures such as strengthening the system for recognizing and awarding high-performing teachers; ensuring that national, municipal, and school awards are aligned with standards of effective teaching (Goal 6 below); and ensuring the success of teachers is communicated to the wider public in way as to improve the morale of the teacher corps in general.

Goal 3: Preparing teachers with useful training and experience

Current teacher initial education systems may not be best suited to ensure good quality teachers. Beginning teachers have opportunities to develop practical teaching skills, but only for a limited period of time before they are expected to teach without guidance.

- Require more extensive teaching practice before teachers obtain certification.
- Expand pedagogical qualification standards to strengthen the quality of programs providing pedagogical qualifications (especially concurrent programs).
- Require junior teachers to participate in induction programs and receive mentoring by high-performing colleagues.

Goal 4: Matching teachers' skills with students' needs

There are no official systems in place to ensure that there are no teacher shortages in hard-to-staff schools, or for teaching critical shortage subjects, but some shortages have been partially addressed. Some policy suggestions, include:

- Develop a system that systematically identifies shortages – both in critical subject shortages and in hard-to-staff schools.
- Provide visible incentives to teachers to work in hard-to-staff schools (e.g. promotion, higher salary, scholarships for education, or housing)
- Provide more incentives to teachers to teach critical shortage subjects (similar to the ones above). Another option is to provide scholarships specifically for education in subject areas with shortages (e.g. scholarships for studying Natural Sciences Pedagogy if Natural Sciences is identified as a critical shortage subject area).

Goal 5: Leading teachers with strong principals

Principals are currently expected to monitor teacher performance and provide support to teachers to improve instructional practice, and their performance is rewarded. At present there are no specific training

requirements to ensure that principals have the necessary skills to act as instructional leaders and successful managers. The following measures may help to ensure principals are more effective leaders:

- Conduct a needs assessment to better understand the specific needs and issues principals face in their work.
- Provide principals with an obligatory mentorship program, instructional leadership training and ongoing professional development (stipulated in the new Draft Law).
- Ensure student achievement and teacher performance are factored into principal performance reviews and they carry significant weight in the review process.
- Ensure principals see professional development of teachers and school improvement as their core responsibility.
- Ensure principal appointments are based on merit and not entirely on tenure in order to open a career track to highly effective teachers.

Goal 6: Monitoring teaching and learning

There are systems in place to assess student learning in order to inform policy but not teaching. Teacher performance is evaluated annually, but the criteria used might not be capturing effective teaching. Some policy options for improving existing teacher evaluation systems include:

- Create standards for teachers that can be used as benchmarks for teacher evaluations.
- Ensure teacher evaluation systems accurately capture quality teaching and are tied to learning outcomes and student achievement. This could possibly mean using multiple mechanisms to evaluate teachers including classroom observations, student feedback surveys, parent feedback surveys, student results as measured by standardized assessments, teacher-created assessments, or authentic assessments.
- Create a system for external evaluation of teachers (stipulated in the new Draft Law).
- Ensure that student achievement data collected are comparable year-on-year, so that it becomes possible to evaluate teacher and school performance over time.

- Ensure that the purpose and uses of external student assessments are regulated explicitly and in detail, to make sure that available data on school performance is used to continuously improve the system.

Goal 7: Supporting teachers to improve instruction

There are currently some opportunities for teacher professional development, but requirements for teachers (e.g. the number of days for professional development) are not specified and teachers are required to pay for some of their own professional development activities. Some possible measures include:

- Continue to require that primary and secondary school teachers participate in professional development activities and stipulate (as the Draft Law does) how often it happens.
- Focus more on ensuring the quality rather than quantity of professional development activities. According to TALIS (2007), Bulgaria ranks among the top 3 countries in terms of hours spent in professional development but lags behind in terms of student results. Ensure third-party professional development providers are properly accredited.
- Monitor the supply and demand for particular professional development activities.
- Monitor the effects of participation in professional development activities.
- Ensure schools have adequate funding to invest in the professional development of teachers.

Goal 8: Motivating teachers to perform

There are currently some mechanisms in place to hold teachers accountable. For instance, teacher's salary bonus is linked to teacher performance, but promotions are not. The following options might help to motivate teacher performance:

- Tie teacher evaluations (Goal 6 above) to compensation and promotion opportunities.
- Reward high-performing teachers with more desirable incentives—monetary, as well as non-monetary (such as prizes and awards).
- Ensure teachers are recognized and rewarded for investing time and effort into activities

related to instructional improvement by making the latter a prominent part of the teacher standard and the performance appraisal.

- Ensure monetary performance bonuses are set so that they serve as an inducement for teachers to improve performance (i.e. they are tied to measures that capture effective teaching and they are significant enough to act as an incentive).

Acronyms

MOMN Ministry of Education, Youth and Science

RIO Regional Inspectorate of Education

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References

- Attfield, Robin. (2011). "Development of Accreditation for School Directions: Discussion Paper." Washington, DC: World Bank.
- Barber, M., & Mourshed, M. (2007). *How the World's Best-Performing School Systems Come Out on Top*. London, UK: McKinsey & Co.
- Campante, F. & Glaeser, E. L. (2009). "Yet Another Tale of Two Cities: Buenos Aires and Chicago." NBER Working Paper 15104. Cambridge, MA: National Bureau of Economic Research (NBER).
- Chaudhury, N., Hammer, J., Kremer, M., Muralidharan, K., & Rogers, F. H. (2006). "Missing in Action: Teacher and Health Worker Absence in Developing Countries." *Journal of Economic Perspectives*, 20:1, pp. 91-116.
- Coalition of the Independent Syndicates of Bulgaria (Syndicate of the Bulgarian Teachers). (2013). "Identification of the Social and Economic Consequences of the Introduction of the Delegated Budgets System: Results from the National Survey."
- Darling-Hammond, L. (2010). "Steady Work: How Countries Build Successful Systems." In Darling-Hammond, L. (2010). *The Flat World and Education: How America's Commitment to Equity Will Determine Our Future*. New York, NY: Teachers College.
- Darling-Hammond, L.; & Rothman, R. (2011). *Teacher and leader effectiveness in high-performing education systems*. Washington, DC: Alliance for Excellent Education.
- Habyarimana, J. (2007) *Characterizing Teacher Absence in Bulgaria: Evidence from 2006 Unit Cost Study*. Washington, DC: The World Bank.
- Hanushek, E. A., & S. G. Rivkin. (2010). "Generalizations about Using Value-Added Measures of Teacher Quality." *American Economic Review*. 100 (2): 267–71.
- Hanushek, E. & Woessmann (2007). "Education Quality and Economic Growth." Washington, DC: The World Bank.
- Hanushek, E. & Woessmann (2009). "Schooling, Cognitive Skills, and the Latin American Growth Puzzle." NBER Working Paper 15066. Cambridge, MA: National Bureau of Economic Research (NBER).
- Herrmann, M. A., & Rockoff, J. E. (2009). "Work Disruption, Worker Health, and Productivity: Evidence from Teaching." New York, NY: Columbia Business School.
- Ingersoll, R. (2007). *A comparative study of teacher preparation and qualifications in six nations*. Consortium for Policy Research on Education.
- Levin, B. (2008) *How to change 5000 schools*. Cambridge, MA: Harvard Education Press.
- Mavrodieva, M (2009) *TALIS: Creating Effective Teaching and Learning Environments: First Results from TALIS Bulgaria*. Sofia: OECD/CKOKUO
- Miller, R. T., Murnane, R. J., & Willett, J. B. (2008). "Do Teacher Absences Impact Student Achievement? Longitudinal Evidence From One Urban School District." *Educational Evaluation and Policy Analysis*, 30(2), 181-200.

- National Statistical Institute. (2013). "Net Enrollment of Children in Kindergartens Table," <http://www.nsi.bg/otrasalen.php?otr=36&a1=1267&a2=1271&a3=1272#cont>, Accessed 3 July, 2013.
- Nye, B., Konstantopoulos, S., & Hedges, L. V. (2004). "How Large Are Teacher Effects?" *Educational Evaluation and Policy Analysis*, 26(3), 237-257.
- OECD. (2009). *PISA 2009 Results: What Students Know and Can Do—Student Performance in Reading Mathematics and Science*, <http://dx.doi.org/10.1787/9789264091450-en>, Accessed 3 July, 2013.
- OECD. (2011.) *Building a high-quality teaching profession .Lessons from around the world*. Paris: OECD.
- OECD. (2012). *Preparing teachers and developing school leaders for the 21st century*. Paris: OECD.
- Park, A., & Hannum, E. (2001). "Do Teachers Affect Learning in Developing Countries?: Evidence from Matched Student-Teacher Data from China." *Paper presented at the Conference Rethinking Social Science Research on the Developing World in the 21st Century*. Park City, Utah: Social Science Research Council.
- PIRLS. (2001). *PIRLS International Report*, http://timss.bc.edu/pirls2001i/pdf/P1_IR_Ch01.pdf, Accessed 3 July, 2013.
- Pritchett, L. & Viarengo, M. (2009). "Producing Superstars for the Economic Mundial: The Mexican Predicament with Quality of Education. PEPG Working Paper 09-01. Cambridge, MA: Program on Education Policy and Governance (PEPG).
- Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). "Teachers, Schools and Student Achievement." *Econometrica*, 73(2), 417-458.
- Rockoff, J. E. (2004). "The Impact of Individual Teachers on Student Achievement: Evidence from Panel Data." *American Economic Review*, 94(2), 247-252.
- Rogers, F. H., & Vegas, E. (2009). "No More Cutting Class? Reducing Teacher Absence and Providing Incentives for Performance." *Policy Research Working Paper 4847*. Washington, DC: The World Bank.
- Sanders, W. L., & Rivers, J. C. (1996). "Cumulative and Residual Effects of Teachers on Future Student Academic Achievement." *Research Progress Report*. Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center.
- Vegas, E., et al. (2012) *What matters most in teacher policies? A framework for building a more effective teaching profession*. Washington, DC: The World Bank.
- World Bank. (2010). "A Review of the Bulgaria School Autonomy Reforms." Washington, DC: World Bank.

Official documents

- Collective Labor Contract (Bargaining)
- Draft Law of Preschool and School Education
- Instruction 1 for the Realization of Control in Education System
- Instruction 2 from 1994 for the Requirements Regarding Obtaining Teacher Position according to the Education, Professional Qualification and Legal Capacity Attained
- Instruction for the Safety Requirements in the Education System
- Job Description for Secondary School Teacher Position
- Labor Code
- Law for Education Degrees, Minimum Education Requirements and School Plans
- Law of School Education (Current)
- Manual for Application of the Law of School Education (Current)
- Order 1 for the Clothes Benefits for Education Employees
- Order 1 for the Salaries of Education Employees
- Order 2 for the School Curriculum
- Order 3 for the Student Assessment System
- Order 3 for the Teacher Loading Norm and the Rules for Numbers of Teachers in the Education System

Order 5 for the Continuous Teacher Qualification in the Education System and Rules for Obtaining Professional Teacher Degrees

Order for Requirements for Eligibility to Teach

Order for School Time Planning

Order for the Structure and Organization of Employee Salary

Rules for the Application of Order 5

Rules for the Salary of School Principals

Social Security Code

Annex 1. SABER-Teachers Ratings

The SABER-Teachers team has identified policy levers (actions that governments can take) and indicators (which 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 2. 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, identify the levers in the second paragraph, and the remaining paragraphs are used to 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), which describes 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 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 that are rated “advanced” toward a particular policy goal are those that have multiple policies conducive to learning in

place under each of the policy levers used to define a policy goal.

- **Established**—“Established” systems are those that have at least one policy/law in place that uses those policy levers.
- **Emerging**—“Emerging” systems may have only some appropriate policies in place under the policy goal.
- **Latent**—“Latent” systems are those that have none or few. Please refer to Vegas et al. 2012 for a detailed review of policy levers and indicators assessed for each goal.

Please reference the Vegas et al. (2012) background paper, “What matters most for teacher policies? A framework for building a more effective teaching profession,” for more details about these definitions and a detailed review of policy levers and indicators used by SABER-Teachers.

For more information regarding the SABER-Teachers methodology, please contact: HelpdeskTP@worldbank.org.

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 policymakers 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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