Croatia

TEACHERS

SABER Country Report 2015

Policy Goals	Status
1. Setting Clear Expectations for Teachers There are clear expectations for what students should learn and what teachers are supposed to do in Croatia. Teachers' working time includes both teaching and non-teaching tasks related to instructional improvement.	Advanced
2. Attracting the Best into Teaching Croatia has high requirements for entering the teaching profession such as competitive pay, appealing working conditions, and attractive career opportunities.	Established
3. Preparing Teachers with Useful Training and Experience Initial teacher education is highly regulated by standards and may ensure quality teachers. Beginning teachers have opportunities to develop practical teaching skills.	Advanced
4. Matching Teachers' Skills with Students' Needs Critical subject shortages are not addressed and there are no incentives for teachers to teach critical shortage subjects or to work in hard-to-staff schools.	Latent
5. Leading Teachers with Strong Principals Croatia does not have standards for qualified school leaders. Entry requirements for principals are very low and without requirements for leadership skills.	Latent
6. Monitoring Teaching and Learning Several mechanisms exist for the assessment of teachers and students at the national level. Findings that could help teachers customize their instruction are, however, not disseminated.	Established
7. Supporting Teachers to Improve Instruction Primary and secondary school teachers must complete a minimum level of professional training. Professional training should provide more opportunities for the analysis of instructional practice.	Emerging
8. Motivating Teachers to Perform Promotion opportunities are linked to performance, though compensation is not. A teacher can be dismissed for incompetence or poor performance. Requirements to remain in teaching are minimal.	Latent

Data collection on Croatia'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.

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 about 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 in order to improve the quality of education.

SABER-Teachers collects data on ten core areas of teacher policy to offer a comprehensively 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 they identify actions that governments can take to improve the 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 set 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 the Republic of Croatia (henceforth Croatia). A collaborative effort between the UNESCO International Task Force on Teachers for Education 2030 and the World Bank Group's 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 Croatia'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 Ministry of Science, Education and Sports of Croatia. Additional information on the teacher policies in the education systems of Croatia and other countries can be found on the SABER-Teachers website.

Country Context

Economic Context

Unlike similar economies in the region, the Croatian economy is still characterized by crisis and recession six years after the financial crisis. The first positive shifts and stronger growth in the economy were measured in the third quarter of 2015. Industrial production grew by 6.4 per cent, which was the highest growth since 2007. Export grew by 10.8 per cent in October 2015 compared with the same period in 2014. Tourism is the only area with consistently positive trends; it is the main source of funds for the national treasury. According to Eurostat, Croatia's 2014 GDP was 10,200 euros per capita. The average monthly net salary in September 2015 was 5,640 kn (€742). In 2014, the employment rate (age group 20-65) was 59.2 per cent, while the youth unemployment rate was among the highest in the EU at 46.3 per cent. Furthermore, the deficit was 5 per cent of GDP in 2014. The economic climate index in June 2015 was the highest since Croatia's admission into the EU and this positive trend continues. As of 2015, foreign direct investments were on the rise (HGK, 2015).

Education Context

In Croatia, the body in charge of overseeing the education system is the Ministry of Science, Education and Sports. The education system consists of preschool, primary, secondary, and tertiary education provided by public and private educational institutions. Education in primary, secondary and higher public educational institutions is free. Preschool includes educational, healthcare, nourishment and social care programmes for children from six months to school age. Eight years of elementary education in Croatia is compulsory for all children aged six to fifteen years old. This refers to all children with permanent residence in Croatia, irrespective of their citizenship.

Upon completing their elementary education, children may pursue secondary education. This is delivered by gymnasia, vocational schools (technical, industrial, craft based), or art schools (music, dance, art). Gymnasia provide a comprehensive syllabus that lasts four years and includes a final examination, the State Matura. Programmes in vocational and art schools range from one to five years and usually end with a final assignment, though it is also possible to sit the State Matura if students have completed four years of secondary education. Along with secondary education, there are adult education programmes as well as other programmes that prepare people to work in their chosen vocation. Since 2010, State Matura results have been the basis for entry into tertiary education institutions. The tertiary education system in Croatia is binary, meaning that prospective students can choose between two types of tertiary education studies: university and professional studies.

Members of national minorities are guaranteed the right to education in their language and script. The 2013 Law on Croatian Qualifications Framework (CROQF) is connected with the European Qualifications Framework for Lifelong Learning (EQF), which includes the Qualifications Framework for the European Higher Education Area (QF-EHEA).

Teacher Policy Context

Teachers and educators in Croatia are employees of public institutions and have civil servant status. Their qualifications and professional development are regulated by national acts and regulations. Primary and secondary school teachers need to hold a degree at ISCED 7 level or above with a minimum 60 credits of teacher competencies (pedagogical-psychological-didactic-methodical education) from the European Credit Transfer and Accumulation System (ECTS).

In order to acquire an open-ended appointment, teachers in Croatia do not need any classroom experience but must undertake a one-year internship. Teachers have opportunities for professional and career development, and their working time is the overall number of working hours (40 hours per week).

In Croatia, the teaching profession is defined and regulated by laws guaranteeing that teachers receive a regular salary and have stable working conditions.

Republic of Croatia's Teacher Policy System Results

Goal 1: Setting clear expectations for teachers

Advanced●●●●

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 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.

(1) In Croatia, the government has established what students should learn and what teachers should do. At the national level, the Ministry of Science, Education and Sports is responsible for setting education goals and controlling the national curriculum. The national standards, set in the national curriculum, inform teachers of required subject content and measurable indicators of learning that should be achieved by students at each level. Tasks that teachers are expected to perform are officially defined.

(2) Policies recognize the diversity of teachers' tasks, and allocate time to complete them. Laws and regulations in Croatia recognize the diversity of teachers' tasks. These tasks go beyond classroom teaching to include supervising students, grading assessments, integrating more vulnerable student populations (such as those with immigrant backgrounds), sitting in for absent teachers, mentoring or supporting other teachers, participating in administrative or management tasks, collaborating on preparing school plans, designing the curriculum, and taking part in the internal evaluation activities of the school (Table 1). Teachers' working time in Croatia is officially defined as the overall number of working hours (40 hours per week).

Successful education systems such as those of Ontario (Canada), Finland, Japan, South Korea and Singapore tend to devote a smaller share of teachers' time to actual contact with students than do other systems, but a larger share of time to teacher collaboration, on-site professional development, and research on the effectiveness of teaching strategies. These systems devote considerable time at the school level to instructional improvement activities, including collaborative teacher analysis of instructional practice, and mentoring and professional development (Darling-Hammond and Rothman, 2011; Darling-Hammond, 2010; Levin, 2008). In Croatia, primary school teachers are expected to devote a comparatively low 50 per cent of their working time to teaching, and teachers' official tasks include the tasks related to instructional improvement as listed below.

Table 1. Teachers' official tasks related to instructional improvement

	Croatia	Serbia	FYR Macedonia	Japan	Shanghai
Mentor peers	✓	✓	✓	✓	
Collaborate on school plan	✓	✓	✓	✓	✓
Design curriculum	✓		✓	✓	
Participate in school evaluation	✓	✓	✓	✓	

Source: SABER-Teachers database

Although teachers' tasks and working hours are clearly defined in policy documents, in practice, teachers frequently complain that they work more than prescribed. They perceive administrative duties, extracurricular tasks, and interaction with parents and the local community as time-consuming. In particular, most teachers consider the working hours allocated to administrative duties as too high. Teachers frequently voice their concerns in the media and at conferences.

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.

(1) In Croatia, teachers are required to have an advanced degree. Furthermore, different paths to enter the profession broaden the pool of potential teachers. Education systems where teacher positions are competitive often have rigorous entry requirements. Systems where entry into 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. Croatia has two models of initial teacher education for both primary and secondary education teachers: concurrent and consecutive. Teachers who work in primary schools (grades 1-4) need to complete a concurrent model of education, an integrated five-year study programme, and have a master's degree (ISCED 8). Subject teachers who work in primary schools (grades 5-8) and secondary school teachers need to complete either a concurrent model of education (master's degree, ISCED 8) or a consecutive model of education (master's degree, ISCED 8, or a bachelor's degree, ISCED 7, plus the special teacher competences programme at level ISCED 8). Teachers of practical training can have a former two-year degree or a secondary school diploma. An initial teacher education programme for Vocational and Technical Education (VET) teachers was being developed at the time the data for this report was collected.

Although an advanced degree is required to enter into the teaching profession, additional requirements are not as stringent. In high-performing education systems, stringent requirements may include passing a written test, taking interviews, and having a minimum amount of professional experience, among others. However, in Croatia's case, some of these requirements are already embedded within initial teacher education programmes that are necessary in order to graduate (Table 2).

Table 2. Additional entry requirements for the teaching profession

	Croatia	Serbia	Japan	Shanghai	Turkey
Pass written test			✓	✓	✓
Interview-stage assessment			✓	✓	
Minimal practical experience			✓		✓
Practical experience assessment			✓		✓

Source: SABER-Teachers database

(2) Teachers pay may be competitive. A teacher's starting pay in Croatia is 80 per cent or more of GDP per capita, which is comparatively high. The challenge is the low GDP in Croatia and high living standards in comparison with other EU Member States.

(3) Working conditions may be appealing enough to attract talented individuals to the teaching profession. 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.

The most recent school census data from 2007 suggested favorable pupil-teacher ratios. According to Eurostat, for the year 2012, the pupil-teacher ratio for primary education was 14.2:1, and 9.7:1 for secondary education.

It should be noted that there is substantial variation among schools (Eurostat, 2015). For instance, in urban schools, the ratio may be as high as 30 pupils per teacher, whereas class sizes in rural schools may be as low as one to two pupils per teacher.

There are standards of infrastructure, hygiene and sanitation for schools in Croatia. According to the available data, at least 98 per cent of schools comply with these standards.

(4) Effective teachers have opportunities to grow and advance in their careers. Teachers in most education systems have the opportunity to be promoted to 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 solely to managerial positions (OECD, 2012; Darling-Hammond, 2010).

Teachers in Croatia have opportunities for professional development and career advancement over their lifetimes. Teachers can apply for both administrative and academic posts, such as academic lead-teachers, master teachers and heads of departments. Furthermore, there are incentives for public school teachers to take on an academic lead-teacher role. Teachers may apply to become principals and their promotion opportunities are linked to their performance.

Although the requirements for attracting the best into teaching exist, in practice, teaching is not considered an attractive profession. According to the SABER-Teachers framework, policies are in place to attract qualified candidates into teaching, teachers are provided with opportunities for professional development, and teachers are paid satisfactory salaries. However, teaching is not considered an attractive profession for young people in Croatia. The social perception of the teaching profession is not very positive due to the high demands required to enter and stay in the profession, as well as the challenges posed by the workload and stress. This can be seen, for example, in the gap between policy intent and policy implementation for Goal 1, as teachers often have to work more than their prescribed hours.

Goal 3: Preparing teachers with useful training and experience

Advanced●●●●

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.

(1) Initial teacher education requirements are aligned with those of the most successful education systems. Virtually all high-performing countries require that teachers have the educational equivalent of ISCED 5A (a research-oriented bachelor's degree). Certain systems, such as in Finland, also require a research-based master's degree (OECD, 2011). Currently, all teaching candidates in Croatia have an educational equivalent above ISCED 5, with the exception of teachers with practical training in VET schools that have the educational equivalent of ISCED 4. As mentioned before, there are two models of teacher education: concurrent and consecutive (Table 3). Teachers who work in primary schools (1st to 4th grade) need to complete a concurrent programme, which includes a five-year study programme, and also have a master's degree (ISCED 8). Teachers who work in primary schools (5th to 8th grade) and secondary school teachers need to complete either a concurrent model of education (master's degree, ISCED 8) or a consecutive model of education (master's degree, ISCED 8 or bachelor's degree, ISCED 7, plus 60 ECTS of teacher competencies, pedagogical-psychological-didactic-methodical education, at level ISCED 8). By the time the data for this report was collected, a teacher training programme for VET teachers was being developed.

Table 3. Models of teacher training

	Croatia	Serbia	Japan	Shanghai	Singapore
Concurrent Model	✓			✓	✓
Consecutive Model	✓	✓	✓		✓
Alternative Model				✓	

Source: SABER-Teachers database

(2) New teachers are required to have practical classroom experience before entering the profession. Practical experience is a critical factor in preparing teachers to enter 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 teachers' first and even second year on the job (Darling-Hammond, 2010; Ingersoll, 2007). In Croatia, student teachers for primary and secondary education positions have practical classroom experience during their initial education, though the duration varies across teacher training institutions. All novice primary and secondary school teachers have a one-year internship. During that time, new teachers go through induction and mentoring programmes, after which they are required to pass a professional exam.

Goal 4: Matching teachers' skills with students' needs

Latent●○○○

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.

(1) There are no mechanisms to address teacher shortages in hard-to-staff schools. 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 Croatia, there are no mechanisms to address hard-to-staff schools (Table 4). Although there are schools in remote areas, there are no incentives to attract and retain qualified teachers in otherwise unattractive areas. In practice, if there is no qualified teacher to apply for a specific subject teaching position, the school is free to employ a teacher with a degree in a different subject.

(2) While critical-shortage subjects exist, Croatia does not have formal mechanisms for their identification and there are no incentives for teachers to teach such subjects. Most education systems have at least some subjects for which there is a critical shortage of teachers, that is, 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 such incentives. In Croatia, critical-shortage subjects include mathematics, physics and some specific vocational areas such as ICTs, but there is no policy that identifies critical-shortage subjects and there are no mechanisms or incentives to increase the share of teachers of these subjects. Some local authorities try to encourage students to study critical-shortage subjects in schools in their region through scholarships, but this is not formally regulated and depends on local budgets. High-performing systems identify and monitor shortage subjects and use incentives to attract teachers to them. For example, when the United Kingdom faced shortages of mathematics and science teachers, they offered payments to students studying to become teachers in

those subjects to help defray education costs (OECD, 2011).

Table 4. Incentives for teachers to teach in hard-to-staff schools

	Croatia	Serbia	FYR Macedonia	Japan	Shanghai
Promotion opportunities					✓
Higher basic salary				✓	
Monetary bonus			✓	✓	✓
Subsidized education					✓
Housing support				✓	

Source: SABER-Teachers database

Goal 5: Leading teachers with strong principals

Latent ●○○○

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.

(1) There are no training or professional development requirements for principals in Croatia. 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). Principals in Croatia are required to meet only two requirements: a minimum of five years of professional teaching experience and an educational qualification of ISCED 5A and above, although in practice a public school principal in Croatia typically has 15 years of teaching experience. No specific training mechanisms currently exist to ensure that principals develop the necessary skills to act as instructional leaders (Table 5). Specialized coursework, ongoing principal-specific training, mentoring and peer-learning groups could help principals lead their staff based on best practices. There is no policy to evaluate principals' performance, which in turn is not rewarded with incentives or bonuses.

Table 5. Mechanisms to support the development of principals' leadership skills

	Croatia	Serbia	FYR Macedonia	Japan	Shanghai
Specific coursework		✓	✓	✓	✓
Internship				✓	✓
Mentoring programme				✓	✓

Source: SABER-Teachers database

(2) School leader duties in Croatia include evaluating teachers, though they do not provide ongoing support to improve teachers' effectiveness. 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 in 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). Responsibilities of public school principals in Croatia include hiring and dismissing teachers, evaluating teachers and the school's overall performance, managing and overseeing the school budget, managing the distribution of time during school hours, providing guidance for curriculum and teaching-related tasks, responding to requests from national educational authorities, representing the school at meetings and in the community, disciplining students and teachers for absenteeism, and overseeing payment for overtime and extra responsibilities. Although principals in Croatia are required to evaluate teachers, their job description does not include supporting teachers in improving their classroom practice or teaching methods.

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.

(1) In Croatia, there are established systems to assess student learning in order to inform teaching and 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 use 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.

In Croatia, the only national assessment is the State Matura, which is a compulsory exit test applied at the last level of both secondary and VET schools. It is administered annually and it assesses students' performance in mathematics, Croatian, and a foreign language. State Matura scores can be matched to individual teachers. Croatia also participates in international assessments, such as the Program for Student Learning Assessment (PISA), the Trends in International Mathematics and Science Study (TIMSS), the Progress in International Reading Literacy (PIRLS), the International Computer and Information Literacy Study (ICILS), and the European Survey on Language Competencies (ESLC). Student achievement data are available for policy-makers, but the findings are not disseminated and are not used to provide guidance to underperforming teachers and schools. Despite the opportunity to connect the national assessment results to teacher performance, the results of the exam have no impact on teacher evaluation or salary.

(2) There are established systems – both internal and external evaluations – to monitor teacher performance. Most high-performing systems conduct teacher evaluations using several mechanisms for data collection and varied criteria for assessment. Ideally, an evaluation system includes a comprehensive teacher evaluation framework that combines students' results, teachers' portfolios, classroom observations, and feedback from students/parents. International experience and research on the topic suggest that none of these approaches taken separately can produce a balanced and objective evaluation of teacher performance. However, taken together, these evaluations can help identify areas of improvement for teachers. In Croatia, policy instruments to monitor teacher performance exist, but they have not yet been implemented. National authorities track teachers over time through an assigned personal identification number. The teacher's performance is evaluated by school principals. The School Supervision Act from 1997 is not currently implemented in accordance with pedagogical practices. According to that

law, an expert supervisor should visit each school every three years. However, owing to a lack of capacity, this does not often occur in practice. Expert supervisors mostly visit a school when a claim is made against a teacher or when a teacher seeks promotion.

Table 6. Criteria for evaluating teacher performance

	Croatia	FYR Macedonia	Japan	Shanghai	Singapore
Subject matter knowledge	✓		✓		✓
Teaching methods	✓	✓	✓	✓	✓
Student assessment methods	✓	✓	✓	✓	✓
Students' academic achievement	✓	✓		✓	

Source: SABER-Teachers database

(3) Multiple criteria are used to evaluate teacher performance. 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 (Table 6). Ideally, a comprehensive teacher evaluation framework combines students' results, teachers' portfolios, classroom observations and student/parent feedback.

In Croatia, participation in internal evaluations is mandatory for all public school teachers who are evaluated periodically by the school in which they work. The following criteria are used by the school to assess a public school teacher's performance: teacher attendance/absenteeism; subject knowledge; compliance with the curriculum; teaching methods; use of homework in the classroom; student assessment methods; teacher-student interactions; students' academic achievement, socio-emotional development, socio-economic background; participation in class; and teacher-parent interaction.

In addition to classroom observation protocols, self-assessments are used as sources of information as well as assessments by the school principal, students and parents. However, assessments by colleagues are not used. The results of the teacher performance evaluation (conducted by the school) are used to decide the type of professional development activities the teacher should participate in so as to inform classroom practice for promotion decisions, and as grounds for dismissal. Evaluation results have no impact on salary decisions. If a public school teacher obtains an unsatisfactory result in the performance evaluation conducted by their school, they might have to undertake obligatory professional development, receive an assigned supervisor, and/or be removed from the classroom. There are no dismissal or salary implications. If a public school teacher obtains a highly satisfactory result in the performance evaluation conducted by the school where he/she works, the only consequence that may follow is promotion. There are no enhanced opportunities for professional development, no public recognition nor salary increase or monetary bonus.

Although student and teacher performance evaluation is officially regulated, **there is room for improvement**. In particular, the dissemination of results and the alignment between teachers' professional development, the evaluation's results, and salary can be strengthened. In this regard, Croatia should consider developing strategies for implementing the aforementioned changes.

Goal 7: Supporting teachers to improve instruction

Emerging●●○○

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.

(1) Teachers are not required to complete a minimum amount of professional development on an annual basis. Participation in professional development is not compulsory for open-ended public school teachers to remain in the profession for either primary or secondary education teachers. Teachers must undergo professional development programmes only if they want to progress in their career or if warranted by an unsatisfactory assessment. There are official recommendations for the amount of time that public school teachers should devote to professional development activities: five working days per year for both primary and secondary teachers. There are also official recommendations about the professional development content for primary and secondary public school teachers.

Two national educational authorities, the Education and Teacher Training Agency and the Agency for Vocational Education and Training and Adult Education, are responsible for the professional development of public school teachers. In addition, teacher organizations, private institutions and tertiary education institutions also provide professional development for public school teachers. In practice, professional development is funded by local educational authorities, schools, and individual teachers and teacher organizations.

(2) Croatian professional development policies could incorporate other effective methods of professional development. 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 of Japan and Ontario (Canada) devote as much as 40 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, as well as engaging in research, mentoring and/or coaching (Table 7). Available documentation suggests that courses, workshops, education conferences or seminars, qualification programmes, participation in teacher and/or school networks, mentoring and coaching, as well as peer observations are considered as professional development for public school teachers in Croatia. However, school visits and research activities are currently not part of the professional development of Croatian teachers.

Table 7. Types of teacher professional development

	Croatia	FYR Macedonia	Japan	Shanghai	Singapore
Observation visits		✓	✓	✓	✓
Teacher networks	✓	✓	✓	✓	✓
School networks	✓	✓	✓	✓	✓
Research		✓	✓		✓
Mentoring/ coaching	✓	✓	✓	✓	✓

Source: SABER-Teachers database

(3) Teacher professional development is formally assigned based on the perceived need. To ensure that support is customized to each teacher's needs, high-performing systems use performance evaluations to develop customized professional development plans or assign mentors. In Croatia, when teachers perform poorly on internal evaluations, they may be assigned to a supervisor so as to participate in professional development activities and/or they may be removed from the classroom. Teacher professional development can be targeted to meet the needs of specific teachers.

Although ongoing professional development is not required, current institutions provide it to all teachers. While teacher training is not required, in practice, national educational authorities, teacher organizations, private institutions, and tertiary education institutions provide professional development to public school teachers. When organized by national educational authorities, trainers are employed directly by that authority. Most of them do not have teacher

competences in adult education or training methodology.

Goal 8: Motivating teachers to perform

Latent●○○○

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 teacher performance; (2) mechanisms that hold teachers accountable; and (3) performance-based compensation.

(1) Hiring decisions are not linked to teachers' performance outcomes, but promotion opportunities are. To ensure that teachers are capable before granting them long-term contracts, education systems usually implement probation periods for new teachers during which education authorities have the right to withdraw long-term contracts to teachers who underperform. In Croatia, there is no official mandatory probation period for teachers before they are granted open-ended appointments, and official policy does not stipulate that job performance is factored into that decision. School principals have discretion over whether to renew a teacher's contract or not. Promotion decisions are based on past performance and professional development.

(2) There are minimal established mechanisms to hold teachers accountable. 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 and poor performance. In Croatia, even though teachers can be dismissed for misconduct, child abuse and absenteeism, they cannot be dismissed for incompetence or poor performance.

(3) Teacher's compensation is not linked to teacher performance at the school level. To align teacher incentives, the most effective systems at motivating teachers are those with incentives for them to perform well (e.g. performance bonuses). In Croatia, performance reviews inform promotions, though they do not carry salary implications (Table 8). High performing public school teachers neither receive monetary bonuses as rewards for their work nor do the results of teachers' performance evaluations affect their salaries.

Table 8. Incentives for high performance

	Croatia	FYR Macedonia	Japan	Shanghai	Singapore
Individual monetary bonus		✓	✓	✓	✓
School-level bonus			✓	✓	✓
Promotions	✓		✓	✓	✓

Source: SABER-Teachers database

Policy Implications

This SABER country report has offered a snapshot of Croatia'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 Croatia. Policy suggestions are provided only to the priority areas where the level of performance is below 'established'.

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

Croatia has no formal policies to address teacher shortages in hard-to-staff schools or subjects. Although there are critical shortage subjects (such as mathematics, physics and specific vocational areas), there are no incentives for public school teachers to teach these subjects. Therefore, policy recommendations include:

- Formally identifying hard-to-staff schools, monitoring the overall supply of teachers in such schools, and providing incentives for effective teachers to enter and remain in those schools.
- Providing incentives, such as higher salaries and better promotion chances, to teachers of mathematics, physics and other shortage subjects.
- Monitoring the teacher supply systematically in order to be aware of the current shortages and to predict future shortages.
- Providing differentiated scholarship programmes or admission standards to attract teacher candidates to specialize in subjects with teacher shortages.

Leading teachers with strong principals (Goal 5)

To become a public school principal in Croatia, there is a minimum requirement of five years professional teaching experience and a specific educational qualification (ISCED 5A and above). Professional administrative experience or specific courses and training are not necessary to become a principal in Croatia. Policy options include:

- Providing principals with an obligatory mentorship programme, instructional leadership training, and ongoing professional development.
- Initiating a system for evaluating the principal's performance and ensuring that the students' and teachers' outcomes are factored into the principal's performance reviews.
- Establishing a 'leadership academy' to speed up the professional development of school leaders and use the high status of principals to attract highly effective candidates.

Supporting teachers to improve instruction (Goal 7)

There are opportunities for teachers' professional development but their participation is not compulsory. Teachers who want to progress in their career must take professional development programmes. There are official recommendations for the amount of time that public school teachers should devote to professional development activities. The following options are suggested:

- Requiring primary and secondary teachers to participate in annual compulsory professional development, and specifying the time requirements for each of them.
- Developing standards for teacher trainers that provide professional development programmes for teachers.

Motivating teachers to perform (Goal 8)

Croatia offers promotion opportunities linked to a high level of teachers' performance, but does not require probation periods. Professional development and performance evaluation are not required for a teacher to remain in the teaching profession, and high performance does not impact teacher salary. We recommend the following:

- Instituting formal performance reviews that affect compensation.
- Linking teachers' performance reviews to student outcomes.

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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 detail about these definitions, as well as a detailed review of the policy levers and indicators used by SABER-Teachers.

www.worldbank.org/education/saber

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 education—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 towards ensuring that all children and youth learn.

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