



Policy Goals

1. Setting Clear Expectations for Teachers

Expectations for students and teachers are clear, but the statutory definition of teachers' work time does not include the amount of time that teachers spend preparing lessons or fulfilling other duties.

2. Attracting the Best into Teaching

Career opportunities may not be attractive to potential teacher candidates. There are no policies in place to reward teacher performance with higher compensation or promotion, which may discourage highly motivated candidates from becoming teachers. Moreover, poor physical infrastructure may create unattractive work environments for teachers.

3. Preparing Teachers with Useful Training and Experience

While beginning teachers must acquire practical professional experience as part of their training, they lack the necessary training to adequately fulfill their teaching responsibilities.

4. Matching Teachers' Skills with Students' Needs

There are no policies in place to provide incentives for teachers to work in hard-to-staff schools or to teach critical shortage subjects.

5. Leading Teachers with Strong Principals

Although policies require principals to support teachers to improve instruction, they are not required to receive training to improve their abilities.

6. Monitoring Teaching and Learning

Teachers are officially required to take part in evaluations meant to help them improve practice. However, external teacher performance data and classroom observations are not used to improve teaching.

7. Supporting Teachers to Improve Instruction

Teachers are required to receive many hours of professional development annually. However, that professional development does not make use of practice-oriented methods, such as teacher networks, school visits, or mentoring, nor is it customized based on the needs of individual teachers.

8. Motivating Teachers to Perform

While teachers can be dismissed for misconduct, policies do not allow teacher performance to affect promotions, compensation, or dismissals cannot affect hiring and compensation decisions.

Status

Emerging



Latent



Emerging



Latent



Latent



Emerging



Latent



Latent



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. 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, and in fact they often do so, 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 Paraguay. It describes Paraguay 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 Paraguay's and other education systems' teacher policies can be found on the SABER-Teachers website.

Paraguay’s Teacher Policy System Results

Goal 1: Setting clear expectations for teachers

Emerging ●●○○

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.

In Paraguay, there are clearly defined expectations for what students and teachers are supposed to do. Paraguay has defined a set of national standards that inform teachers of required subject content, together with measurable indicators of learning that should be achieved by students at different grades. In addition, the tasks that teachers are expected to carry out are officially stipulated, in a way that recognizes the diversity of teacher tasks outside of basic instruction.

Paraguay’s policies do not recognize the need for teachers to spend working time outside of the classroom. It is important that policies reflect all of a teacher’s duties and provide time to complete them. Paraguay recognizes some teacher tasks outside of the classroom, such as grading and administrative tasks, but not other important tasks—such as mentoring, collaborating on school plans, designing curriculum, or integrating student populations.

In many high-performing systems, by contrast, up to 50 percent of teachers’ work time is committed to preparing effective lessons and completing other tasks. This allows teachers to use their classroom time effectively to teach students and not lose time with classroom administration. High-performers such as Singapore focus most of the non-teaching time on

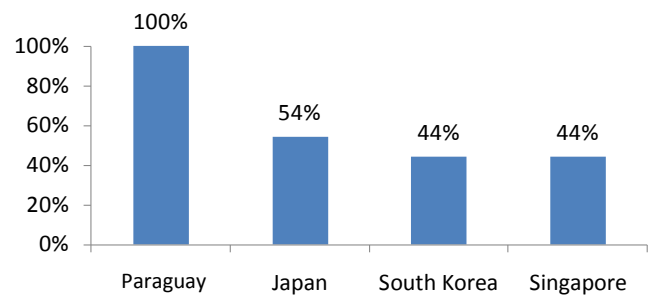
professional development and curriculum planning (World Bank, 2011). According to Paraguay’s policies, teacher schedules do not allot any time for all of their duties; they are paid only for the time they are in the classroom (Figure 2). As a result, teachers may lack time to prepare their lessons effectively, and in turn many not be using all of their classroom time for teaching.

In Paraguay, a large portion of teachers hold multiple positions: they teach at one school in the mornings, and then a second in the afternoons. If teachers have no formal working time outside of class, and have little time outside of work, they are even less likely to have time to prepare to teach effectively.

Figure 2. Official Teacher Tasks

	Paraguay	Japan	Shanghai	Singapore
Support peers		✓		✓
Collaborate on school plan	✓	✓	✓	✓
Design curriculum		✓		✓
Evaluate school	✓	✓		✓

Figure 3. Official Time Designated for Teaching



Source: SABER-Teacher Data; OECD (2010)

Goal 2: Attracting the best into teaching

Latent ●○○○

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 opportunities for them to develop as professionals.

SABER-Teachers considers four policy levers 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.

Requirements to become a teacher are not very stringent. In Paraguay, teachers must complete a tertiary teaching degree, but there are no other requirements such as passing a test, having previous professional experience, or passing a practice-based assessment (Figure 3). These undemanding requirements may reduce the prestige and attractiveness of the profession.

There are multiple paths for becoming a secondary teacher, but not for becoming a primary teacher. Many high-performing systems allow candidates to enter the teaching profession through multiple teacher preparation pathways. In Paraguay, policy at the secondary level does allow aspiring teachers who have already acquired degrees in relevant fields to become certified through a brief course that focuses on teacher practices and pedagogy instead of content knowledge. By contrast, all primary teachers must pass the same training model, whether they are beginning their careers or are experienced non-teaching professionals.

Teacher compensation policies are not designed to reward the most effective teachers. Teacher compensation is subject to a specific pay scale that does not account for teacher effort or results. People who could be tomorrow’s high-performing teachers may instead choose a profession that offers greater rewards for their strongest professionals.

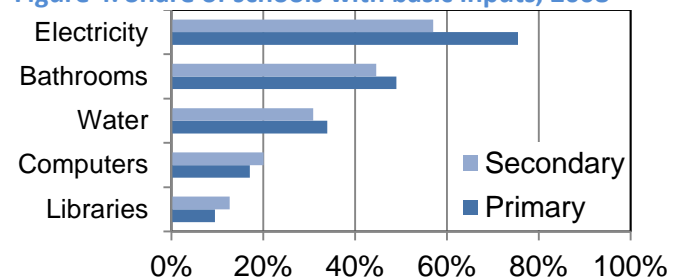
Working conditions may deter some high-quality candidates. Working conditions such as student-teacher ratios, school infrastructure and learning materials and other factors contribute to teachers’ overall job satisfaction performance. Potential teachers may choose other professions that have more attractive environments and benefits. In Paraguay, pupil-teacher ratios in primary and secondary school are 28 and 12, respectively, which is similar to high performers. However, the majority of schools in Paraguay have poor physical infrastructure and lack basic learning materials, (SABER-School Finance, 2012). Additionally, many teachers work multiple positions, suggesting either low pay or long hours that may deter some candidates. Career opportunities within the teaching profession may not be sufficiently merit-based to attract talented individuals. Opportunities to assume greater responsibility and grow during your career attract talented and ambitious people to the profession. In Shanghai, for example, talented members of the profession may later become administrative leaders or curriculum specialists. In Paraguay, teachers may apply to become principals or academic specialists, but promotion is based on seniority, not merit.

Figure 2. Requirements to enter the profession

	Paraguay	Japan	Shanghai	Singapore
Pass written test		✓	✓	
Interview-stage assessment		✓	✓	✓
Minimum practical experience		✓		✓
Assessment based on experience		✓		✓

Source: SABER-Teacher Data (2012)

Figure 4. Share of schools with basic inputs, 2008



Source: SABER-School Finance (2012). Shares interpreted from data collected for xx project.

Goal 3: Preparing Teachers with Useful Training and Experience

Emerging ●●○○

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.

Teachers in Paraguay are required to acquire at minimum an ISCED 5B educational qualification. In most countries, one must complete certain requirements including coursework before becoming a teacher, to ensure minimum content knowledge and teaching skills. Teachers in Paraguay must acquire an occupation-oriented tertiary degree (at the level of ISCED 5B) before teaching (Figure 5). By comparison, the highest-performing education systems require a more rigorous bachelor’s degree (ISCED 5A).

Teacher entrants are required to have substantial practical experience through a mentoring program. The more practical experience new teachers have, the better prepared they will be for their job. Most high-performing systems, for instance, 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 Paraguay, policies require that teacher training programs incorporate six months to a year of classroom experience (Figure 5).

Some education systems also include mentoring or induction programs to help new teachers in the first year in the classroom. No such programs are required or offered for beginning teachers in Paraguay.

Figure 5. Required classroom experience, secondary teachers

	Paraguay	Japan	Shanghai	Singapore	South Korea
3 months or less					✓
12 months or less	✓		✓		
12-24 months				✓	
More than 24 months		✓			

Source: SABER-Teacher Data (2012)

Current Reforms: Accreditation and Evaluation of Teacher Training Institutions

In 2009, the Ministerio de Educación y Cultura began piloting a new mechanism in accreditation of teacher preparation programs. As initially outlined in the *Mecanismo de Licenciamiento de Instituciones de Formadoras de Docentes*, the new evaluation program incorporate self-evaluations and external evaluations of teacher preparation programs. This information will help inform a final review by the MEC.

Goal 4: Matching teachers’ skills with students’ needs

Latent ●○○○

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 critical shortage areas.

No policies exist to ensure quality teachers are distributed throughout all schools in Paraguay. Attracting effective teachers to work in hard-to-staff schools, which typically serve students from disadvantaged populations, is a challenge for many countries. To attract teachers to work under these conditions often requires additional incentives, such as greater career opportunities or better pay. No such incentives exist in Paraguay (Figure 6).

Often education systems use seniority as a basis for approving transfer requests, which often exacerbates teacher deployment problems. By permitting the most seasoned teachers to leave hard-to-staff schools, less experienced and potentially less capable teachers remain at underserved schools. In some high-performing systems, teacher transfers are informed primarily by school needs and teacher qualifications. Paraguay’s policies state that student transfers may occur to improve education quality and make no mention of teacher seniority, suggesting that it does not suffer from this problem.

Paraguay’s policies do not formally recognize or address subjects suffering from teacher shortages. In almost all countries, there is particularly high demand

for teachers of particular subjects. In Paraguay, no policies recognize the existence of shortage subjects, nor do they attempt to increase the supply of teachers of those subjects (Figure 7). High-performing systems formally identify, monitor, and use incentives to attract teachers of shortage subjects. For example, when the United Kingdom faced shortages of mathematics and science teachers, they offered payments to people studying to become teachers in those subjects to defray education costs (OECD, 2011).

Figure 7. Incentives to teach shortage subjects¹

	Paraguay	Japan	Shanghai	South Korea
Formal identification of shortage subjects		✓	✓	✓
Higher basic salary		✓		
Monetary bonus			✓	
Subsidized education			✓	

Source: SABER-Teachers Data.

Figure 8. Incentives to teach in hard-to-staff schools¹

	Paraguay	Japan	Shanghai	South Korea
Promotion opportunities			✓	✓
Higher basic salary		✓		
Monetary Bonus		✓	✓	
Subsidized education			✓	

Source: SABER-Teacher Data.

¹ Note: Singapore has no specific deployment school and subject incentives but instead centrally manages teacher deployment

Goal 5: Leading Teachers with Strong Principals

Latent ●○○○

The quality of school leaders is second only to classroom teaching as a predictor of student learning (Eberts & Stone 1988; Leithwood, et al. 2006). Quality principals attract and retain quality teachers (Boyd, et al. 2009; Ingersoll 2001a, 2001b; Papa Jr., Lankford & Wyckoff 2002). In addition, capable principals can spearhead much-needed change at the school level, so having strong leaders is important not only to ensure acceptable levels of performance but also to drive improvements. Finally, good principals can facilitate teachers’ work and continuous improvement. The more capable a principal is, the more he or she can support teachers, create a sense of community, make teachers feel valued and ease their anxiety about external pressures (Mulford 2003).

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.

There are no requirements or preparation specifically for principals. Most high-performing systems require participation in an internship or mentoring program to help new principals learn from the experience of others, and require principals to complete training or courses relevant to school leadership and administration. In Paraguay there are no such requirements to become a principal that are distinct from those of a teacher, although principals must have 7 years of professional teaching experience (Figure 8).

Additionally, some high-performing systems provide monetary incentives for principals to improve school quality, which may motivate principals. Paraguay does not provide any such incentives.

Principals are expected to support teachers in improving their instruction. More than just serving as administrators, effective principals support teachers in their work. 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). Principals in Paraguay are officially expected to support teachers to improve instruction and their classroom practice. Principals are expected to serve as leaders in their schools, take part in teacher and school evaluations, and enumerate teacher responsibilities.

Figure 9. Requirements to become a Principal

	Paraguay	Japan	Shanghai	Singapore	South Korea
Specific coursework		✓		✓	✓
Internship		✓	✓	✓	✓
Mentoring program		✓	✓	✓	✓

Source: SABER-Teachers Data.

Goal 6: Monitoring Teaching and Learning

Emerging ●●○○

Student learning assessments may inform overall policy but not individual teacher practice. National student assessments can help authorities identify individual students, student groups, schools, and classes that are in need of extra attention. All high-performing education systems ensure that there is enough student data to inform teaching and policy. These 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 access these to inform policy, and (3) There is a mechanism to feed these data back to the school level, so that teachers can use the data to improve classroom practice. Paraguay conducts national assessments of a sample of students aged 8, 11, 14, and 18. While the assessments cannot be linked to individual teachers and therefore cannot help them improve individual teacher practice, the overall findings do help to identify trends, and they are reported to higher authorities.

Systems to monitor teacher performance exist. In Paraguay, policies require teachers to participate regularly in performance evaluations conducted by principals. The results can be tracked over time (Figure 9), which may help identify patterns in individual teacher performance. Some high-performing systems use external evaluators to ensure feedback is more useful to central authorities.

Policies make use of multiple mechanisms to evaluate teacher performance. Research suggests that no single method of evaluating teacher performance is failsafe. Most high-performing systems conduct teacher evaluations using a variety of mechanisms of data collection and varied criteria for assessment. In Paraguay, policy stipulates performance evaluations must incorporate input from principals, but not from other teachers or classroom observation. Many systems have improved outcomes by making use of student achievement data and external evaluators.

Similar to policies of high-performing countries, Paraguay’s policies list a variety of criteria to be used to assess performance. These include: subject matter

knowledge, teaching methods, and student assessment methods.

Figure 10. Methods Used to Monitor Teachers

	Paraguay	Japan	Shanghai	Singapore	South Korea
Required performance evaluations	✓	✓	✓	✓	✓
Performance monitored by authorities		✓	✓	✓	✓
Teachers can be tracked over time	✓	✓	✓	✓	✓

Source: SABER-Teachers Data

Goal 7: Supporting teachers to improve instruction

Latent ●○○○

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) teacher professional development that is assigned based on perceived needs.

Teachers are required to take part in professional development as part of their official duties. Professional development in Paraguay is included in the hours that teachers are required to attend school. Similar to high-performing education systems, Paraguay requires over 10 days of teacher professional development annually. To encourage teachers to obtain all the professional development they need, high-performing systems cover all the costs of professional development. However, according to respondents, professional development in Paraguay is said to be free to teachers in policy, although this is not the case in practice.

Paraguay’s policies do not encourage the most effective professional development activities. Effective teacher professional development is collaborative and provides opportunities for the analysis of instructional practice (Darling-Hammond & Bransford, 2005). While teachers in Paraguay have many hours of required professional development, the definition of professional development is limited to courses, certifications, and workshops, and it omits some highly effective methods that have been linked to student achievement (Villegas-Reimers, 2003). Evidence suggests other professional development activities that are oriented to improve

instructional practice and student achievement, such as strong teacher mentoring networks, peer observations of highly effective teachers, and mentoring or coaching opportunities (Figure 10).

Policies do not permit assigning professional development based on individual needs. To ensure support is customized to each teacher’s needs, high-performing systems use performance evaluations to develop customized professional development plans or assign mentors. In Paraguay, teachers are not assigned professional development based on performance evaluations; nor does policy allow for teachers to be assigned a supervisor or mentor based on evaluations.

Figure 12. Use of Highly Effective Professional Development Methods

	Paraguay	Japan	Shanghai	Singapore
Observation visits		✓	✓	✓
Teacher networks		✓	✓	✓
School networks		✓	✓	✓
Research		✓		✓
Mentoring or coaching		✓	✓	✓

Source: SABER-Teachers Data.

Goal 8: Motivating teachers to perform

Emerging ●●○○

Adequate incentives for teachers can contribute to effective teaching and learning. First, incentives are a way for school systems to signal their seriousness in achieving certain goals. The more aligned incentives are with the behaviors and outcomes they want to produce in teaching, the more likely they will obtain them. Second, incentives are also a way to recognize teachers’ work. Teaching is a challenging job and incentives can let teachers know that the results they have achieved are valued so that they continue working hard to sustain them. Finally, some types of incentives can also influence the profile of the teaching profession and make it more competitive, dynamic, and performance-driven.

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.

Promotion opportunities and hiring decisions are not officially linked to teachers’ performance outcomes. To ensure teachers are capable before granting them long-term contracts, authorities need both a probation period upon initial hires and the right not to offer long-term contracts to teachers who do not perform during the probation period. In Paraguay there is a mandatory probation period, but performance on the job during that period does not factor into whether teachers receive appointments. Promotion decisions are also not informed by past performance.

Teachers can be dismissed for misconduct but not for poor performance. It is vital to be able to remove certain teachers from the occupation to maintain minimum standards of student safety and education quality. Paraguay has policies allowing for dismissal based on misconduct, child abuse, and absenteeism, but not poor teacher performance. Requiring teachers to meet some standards to remain in the teaching profession can facilitate the removal of ineffective teachers. One minimum standard is consistent teacher attendance. Research in both developed and developing countries indicates that teacher

absenteeism can reach high levels, negatively impacting student performance (Chaudhury et al. 2005; Herrmann & Rockoff 2009; Miller, Murnane & Willett 2008; Rogers & Vegas 2009). Education systems can encourage teacher attendance by taking it into account in teacher evaluations, providing teachers with incentives to be present in school, and dismissing teachers if they are consistently absent. In Paraguay, performance evaluations and attending professional development are required to remain in the profession.

Teacher compensation is not linked to performance (Figure 11). To align teacher incentives, systems that are most effective at motivating teachers provide incentives to perform well (e.g., performance bonuses). In Paraguay high performing teachers do not receive bonuses as rewards for exemplary performance. In addition, performance evaluations have no effect on teacher compensation.

Figure 13. Employment decisions influenced by performance

	Paraguay	Japan	Shanghai	Singapore	South Korea
Open-ended contracts			✓	✓	
Teacher compensation			✓	✓	✓
Promotions		✓	✓	✓	✓

Source: SABER-Teachers Data

Policy Options

Building on the above snapshot of key teacher policies, this section offers some options to strengthen Guyana's teacher policy framework.

Goal 1: Setting clear expectations for teachers

Teacher expectations are clear, but teachers do not have official time to prepare for class or fulfill other duties.

- Paraguay may consider altering teacher work time to reflect teacher duties outside of the classroom

Goal 2: Attracting the best into teaching

Poor infrastructure and career structure suggest that teaching is a profession unattractive to the best candidates.

- Paraguay may consider improving school and classroom conditions.
- Paraguay may want to review its pay structure for teachers and consider how to attract high-quality candidates.

Goal 4: Matching teacher' skills with students' needs

Government policies provide no incentives for teachers to work in schools or subjects with a staff shortage.

- The government could formally identify subjects with a lack of teachers, monitor enrollment of teachers in those subjects, and provide incentives (such as better career opportunities or compensation).
- Policies could be designed to encourage teachers to remain in hard-to-staff schools, and career and transfer policies could be altered to encourage teachers to spend more time in hard-to-staff schools.

Goal 7: Supporting teachers to improve instruction

While primary and secondary school teachers are required to participate in professional development, it is offered through traditional coursework does not make use of methods research suggest are most likely to improve teacher practice and outcomes.

- Instead of conducting professional development in traditional workshops, Paraguay could encourage teachers to share best practices through teacher networks, observation visits to model schools and school networks.
- Paraguay could offer teachers opportunities to analyze their instructional practice through mentoring and coaching throughout their career.

Goal 8: Motivating teachers to perform

Paraguay requires probation periods of new teachers, but does not decide hiring or compensation based on teacher performance.

- Paraguay could allow required performance evaluations to inform a portion of teacher compensation.
- Paraguay could use performance during probation periods to inform long-term hiring decisions.

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References

- 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. (2005). "Missing in Action: Teacher and Health Worker Absence in Developing Countries." PEPG Working Paper Series. Cambridge, MA: Program on Education Policy and Governance (PEPG).
- Darling-Hammond, Linda. (2000). "How Teacher Education Matters." *Journal of Teacher Education*, 51(3), 166-173.
- 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).
- Nye, B., Konstantopoulos, S., & Hedges, L. V. (2004). "How Large Are Teacher Effects?." *Educational Evaluation and Policy Analysis*, 26(3), 237-257.
- 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.
- 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.
- 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.

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 Teacher Policy.

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