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What Matters Most for  
School Finance:  
A Framework Paper



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## Contents

Acknowledgements.....	3
Introduction .....	4
1. What are the main characteristics of school finance systems? .....	5
1. School conditions and resources.....	5
2. Allocation mechanisms .....	6
3. Revenue sources .....	7
4. Education spending .....	7
5. Fiscal control and capacity .....	8
2. What matters in school finance? .....	10
School Finance Policy Goals .....	14
Policy Goal 1: Ensuring basic conditions for learning .....	16
Policy Goal 2: Monitoring learning conditions and outcomes .....	22
Policy Goal 3: Overseeing service delivery.....	24
Policy Goal 4: Budgeting with adequate and transparent information.....	27
Policy Goal 5: Providing more resources to students who need them.....	30
Policy Goal 6: Managing resources efficiently .....	34
3. SABER-School Finance Framework .....	39
Conclusion.....	41
References .....	42
Appendix: Data collected by SABER-School Finance .....	47

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## Introduction

**The drivers of a well-functioning school finance system have not been well established.** How resources for education should be used is often controversial. Non-school factors, as opposed to education spending, may be the strongest influence on student performance (Hanushek 1986; Coleman et al. 1966). However, some uses of education expenditure can make a difference, particularly in the cases of inputs that directly benefit students or resources that compensate for challenges of low-income settings (Heyneman & Loxley 1983; Fuller & Clarke 1994; Pritchett & Filmer 1999; Ferguson & Ladd 1996). School finance is complicated by how to identify and use the proper mechanisms for resource distribution that will ensure that funds reach students and schools. Although education funding has the potential to improve education quality for all, school finance remains an area in need of direction for three crucial reasons:

- **School finance systems are responsible for providing the necessary resources to implement education policies – all education systems rely on financing to function.** Education spending is necessary, though not sufficient, to bring about learning outcomes; it facilitates the provision of essential inputs such as teachers, school buildings, and learning materials. Availability of financial resources does not guarantee a quality education, but a quality education is impossible to achieve without adequate resources (Reschovsky & Imazeki 2001; Clune 1994).
- **Governments sometimes struggle to use education resources efficiently, although they should have a strong incentive to do so.** Education expenditure represents a large share of total public expenditure in many countries, which often signals education as a national priority. The quality of a school finance system potentially impacts a large share of the population: school-age children may reach about a quarter of the total population,<sup>1</sup> and teachers may comprise a substantial share of the total number of government employees (Guthrie et al. 2007). Many education systems seek to raise the quality of education in addition to increasing access, even as many government budgets around the world are shrinking due to the recent economic crisis. At the same time, the use of public funds is under increased scrutiny due to growing interest in public financial accountability. Policy guidance is necessary to use funding in a way that both achieves national education goals and addresses public financial management issues.
- **The complex process of school finance involves a diverse set of actors and stakeholders with different perspectives and motivations, but the system is rarely examined holistically.** Policymakers establish education objectives as well as guidelines for their regulation and execution. Education authorities transform these goals into plans, and financial authorities provide supporting resources. The financial authorities that provide funding often operate separately from education authorities that use the funds. Even within an education agency, school finance experts may not be fully integrated into the rest of the agency, which may complicate the efficient use of resources. Finally, at the school level, resources are used for their ultimate purpose of funding teachers, learning materials, and other support so that all children, as beneficiaries, have the opportunity to learn.

**School finance is an essential component of every education system, but comprehensive guidance on what matters in school finance systems is lacking.** SABER-School Finance meets this need with a

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<sup>1</sup> School-age population calculated with data from the World Bank's EdStats database on the population aged 5-18 as a share of the total, for all countries with available data in 2010.

framework that has dual purposes: to create a knowledge base and to evaluate the quality of school finance systems. First, SABER-School Finance maps systems by collecting comprehensive and standard data in five core areas to describe the policies, official processes, funding mechanisms, and other formal guidelines that influence school finance systems. These data provide context for the assessment of school finance systems, allow countries to learn from systems with similar characteristics, and facilitate future study by other researchers to examine what matters in school finance. The project also enables systems to measure progress toward meeting essential school finance policy goals and gives policy guidance on how best to improve the system. The SABER-School Finance analysis identifies strengths, which can serve as examples to other school finance systems, and weaknesses, or areas to target for reform or additional in-depth research. SABER-School Finance's data and analyses of the management of educational resources are useful to education policy-makers, researchers, and stakeholders (including World Bank operations staff). In this paper, we discuss the main characteristics of school finance systems, present the evidence supporting the choice of school finance policy goals, and explain how the SABER-School Finance framework provides guidance on what matters most in school finance.

## 1. What are the main characteristics of school finance systems?

**Before examining what makes school finance systems effective, SABER-School Finance took stock of the key functions, components, and processes of school finance systems.** To identify these common areas, SABER-School Finance reviewed data available in international databases, information gathered for national or regional studies, academic descriptions of school finance systems, and other relevant sources.<sup>2</sup> After taking stock of the information that is currently collected, SABER-School Finance developed a systematic approach to document school finance systems. The team identified five areas that comprehensively describe school finance systems, and determined where gaps exist in currently available information to comprehensively describe these areas. The project collects data each of the five areas to deepen and broaden the knowledge base on school finance. Some of the data collected are, in turn, used to evaluate the level of development of the school finance system along six policy goals. This section describes the five core areas of school finance: (i) School conditions and resources; (ii) Allocation mechanisms; (iii) Revenue sources; (iv) Education spending; and (v) Fiscal control and capacity.

### 1. School conditions and resources

The school represents the point at which educational resources are ultimately used to improve learning outcomes. School finance systems are therefore interested in the availability of certain inputs in schools, especially teachers, learning materials, and facilities. Although a consistent relationship has not been established between specific school resources as measured by learning materials, student-teacher ratios, teacher experience and qualifications, and spending per student, a lack of critical inputs is likely to negatively influence learning outcomes (Harbison & Hanushek 1992; Glewwe et al. 1995; Tan et al. 1997). While an adequate level of spending on inputs complementary to the learning process is necessary, the appropriate input mix likely varies across and within countries. For example, some systems may choose to attract fewer high quality teachers with higher salaries, and other systems may opt to set small class sizes with more teachers available to increase student-teacher interaction.

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<sup>2</sup> Consulted studies include *Financing Education-Investments and Returns* (UNESCO UIS and OECD), *Quality Counts 2010*, *Fresh Course*, *Swift Current* (Education Week), and *Per Student Financing of General Education in Europe and Central Asia. Has it Delivered on its Promise?* (World Bank), among others.

In many school finance systems, the underlying motive of providing basic educational inputs is to promote student learning. School finance systems also define expectations for quality of education, or to what end these resources should be used. The eventual goal of education is often to increase student achievement, and systems may set other intermediate targets such as completion rates. Measuring learning outcomes with large-scale assessments is an effective way to determine the quality of education, and many education systems are beginning to use assessments for the purposes of accountability and allocation of funds.

## **2. Allocation mechanisms**

The education budget is the government's plan for allocating public resources to achieve educational goals and objectives. Every school finance system has rules (informal and/or formal) that determine the size of the budget, distribution of resources across levels of government and schools, and in some cases, the nature of spending amongst different inputs such as capital and current needs. To determine the level of educational resources to be transferred, funders may negotiate with recipients or determine the level of funds through formula. For the former, subnational levels of government (or schools) present their case for funding based on known criteria to the funding agency (central government) and receive resources according to how well the funding agency considers the bid to meet the criteria. Or, the funding agency may simply modify the previous year's payment up or down a few percentage points, or use its own discretion to determine the level of resources to be allocated to subnational levels of government or schools (Ross & Levacic 1999). Alternatively, transfers can be linked to particular measures, such as number of students or socio-economic characteristics of students, communities, or regions, and are thus determined by formula. The main distinguishing feature of a funding formula is that explicit criteria are determined to guide the transfer of resources from one government level to another, and directly to schools. If the specific formula is relatively easy to understand, made public, and respected and enforced, it may improve equity and accountability as it makes transparent the factors affecting the funding schools receive to educational stakeholders.

Once the amount of resources to be transferred to each receiving government or school is determined, a further decision needs to be made as to the form in which the transfers will take—cash or “in kind.” Many policymakers, particularly in developing countries, use a simple “in-kind” formula that employs student-teacher ratios to guide the allocation of teachers, textbooks, equipment and other materials for schools. Some state that best practices would distribute dollars instead of purchased resources or inputs (Roza et al. 2008; Thomas Fordham Institute 2006). When resources are transferred in kind, the receiving government or school has limited discretion in the use of resources. However, if government transfers resources in the form of cash, there may be stipulations in how the resources are to be spent and are thus identified as categorical/conditional grants; the recipient must use the resources for inputs or activities identified by the funder. Alternatively, when educational resources are transferred in the form of lump-sum/unconditional grants, how the resources are to be spent is left to the discretion of the recipient—though in practice, such discretion is often limited to the purchase of current inputs—teaching materials and teacher salaries, etc. These rules that govern resources flows, as well as the amount of discretion and autonomy at each level to allocate budgets affect the level of accountability, transparency, and performance in the system (Das et al. 2004). National, subnational, and local levels of education authorities as well as schools may allocate budgets differently, or they may have no budget or no budgetary authority at all. Throughout the system, good use of information and analysis in allocation decisions can increase the amount of government resources dedicated to the education sector and improve efficiency of spending.

### 3. Revenue sources

Education systems need to raise sufficient revenues to ensure that, if used efficiently, students may reach appropriate learning goals at each education level. In industrialized nations, much of government funding for public services is raised through taxation—property, income, and sales taxes. However, in low-income countries where tax collection effort is often low and inconsistent, or in crisis or post-crisis situations where state capacity is limited, public sources for domestic education financing are limited (Inter-Agency Network for Education in Emergencies 2008). Nevertheless, domestic sources of revenue remain an important share of education expenditure, even in sub-Saharan Africa (Fredriksen 2008). A big challenge for many countries is to raise adequate revenue to expand enrollment while maintaining, or even raising, school quality. Stakeholders responsible for generating revenue vary in domestic financing of education. Some levels of government or schools may be restricted from raising revenue or from using it for certain purposes. In addition, variation in fiscal capacity to generate revenue by subnational or local division may create wide disparities in resources available for learning, which can be addressed with redistributive intergovernmental grants (OECD 2002).

While increasing efficiency in the use of public resources is one strategy to enhance outcomes, systems often rely on additional funding sources, including international donors or the private sector, including households. In general, international resources represent a relatively small share of total resources for education. However, there are cases where Official Development Assistance (ODA) is a significant source of revenue for basic education. In addition to ODA, a smaller share may come from private donors such as high net-worth individuals, faith-based organizations, corporations and philanthropic foundations in developing and developed countries (Barrera-Osorio & Guáqueta 2010).

Households may also serve as a direct source of education revenue. While primary school registration fees have been abolished in many countries in the developing world, many parents still report paying fees (Transparency International 2009), and parents continue to face significant school-level imposed fees for required inputs such as uniforms, textbooks as well school levies for Parent Teacher Association dues.<sup>3</sup> Some argue that school fees are necessary for cost recovery and increase families' financial stake and in turn, participation in their children's education leading to more efficient operations in schools (Jimenez & Lockheed 1996). On the other hand, others contend that they preclude the poorest, and girls in particular, from attending school and contribute to the very inter-generational transmission of poverty that access to basic education is intended to end (Kattan 2006). Researchers have documented unintended consequences of abolishing school fees, one of which is that the resulting increases in enrollment can lead to drastic declines in school quality (Fiske & Ladd 2008). Another possible unintended consequence of school fee elimination is a reduction in school accountability to households, which may generate further declines in school quality (World Bank 2003; World Bank in collaboration with UNICEF 2009). The sources of funding and the mechanisms through which revenues are raised have implications for adequacy, sustainability, and equity. The composition and amount of revenue may differ across systems, but an appropriate balance among possible revenue sources is necessary.

### 4. Education spending

Education spending represents the point at which monetary resources begin to promote learning outcomes. In fact, countries invest very different levels of resources in education, independent of their income. For example, in the Dominican Republic, public spending on education as a share of GDP, a measure of a country's expenditure effort, is just over 2 percent while that of Botswana is over 8

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<sup>3</sup> In Benin, for example, while the central government grants schools resources to supplant revenue lost with the elimination of school fees, households are expected to contribute relatively large sums for the payment of locally hired teachers (World Bank 2004).

percent (UNESCO Institute for Statistics 2010). On the other hand, countries make relatively similar effort in spending on education relative to national wealth with very different results. Uruguay, devoting 3 percent of its public resources to education relative to GDP, outperforms neighboring countries on the Program for International Student Assessment (PISA) while Argentina, spending 4.6 percent, is the lowest performer among Latin American countries participating in the test.<sup>4</sup> While there is variation in student learning outcomes—including access to schooling, completion of primary or secondary education, how much students learn—among countries that invest relatively large shares of GDP in education, all countries that underperform also invest relatively small shares of their GDP in education (OECD 2002).

Providing inputs requires both current and capital expenditures. Current expenditures refer to those recurrent expenditures that fund the regular operation of the school system, such as teacher salaries and benefits, and teaching materials. Teachers' salaries represent the dominant share of current spending on education in developing and developed countries, and may crowd out other current inputs important for learning. Capital expenditures refer to fixed costs such as school construction costs as well as those related to the long-term maintenance or expansion of buildings. In most regions of the world, capital expenditures represent a relatively small share of total public education expenditure, and are managed by central or state governments (Ross & Levacic 1999). In addition to basic inputs, school conditions are also influenced by the quality of education and student performance.

While research has shown that *how* resources are invested in education, both in terms of what is purchased as well as the incentives imbedded in financing instruments, is more significant than the absolute amount of resources invested (Hanushek 1997; Burtless 1996), a minimum level of financial resources or spending floor appears to be important for ensuring that students have access to a minimum standard of resources and materials (Vegas & Petrow 2008; Roza 2010). However, it is not clear what this minimum spending floor is and it likely varies across and within countries. Further, ensuring an adequate average level of spending does not guarantee that the most vulnerable children will be given equal opportunities through publicly financed schooling to become involved as civic participants and economically productive citizens. Differentiated spending may be necessary to increase equity across student groups such as ethnicity, native language, socio-economic status, or special needs (Oosterbeek & Patrinos 2008).

## 5. Fiscal control and capacity

Much of the school finance literature focuses on measures of *intended* public expenditure, such as budget allocations, instead of *actual* budget expenditure when measuring an education system's quality and equity. However, budget allocations or other measures of intended expenditure may be a poor proxy for education services actually reaching beneficiaries. If resources are not used for their intended purpose, it is unlikely that education services will be of adequate quality. Therefore, a crucial area for understanding school finance systems is the fiscal control mechanisms used to plan, monitor, and execute the education budget.

The break in the chain between budget allocations and education service delivery may occur for several reasons. There may be capacity constraints at the central government level to adequately budget for

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<sup>4</sup> This gap between education spending and student learning is not exclusive to developing countries. In the United States, Massachusetts, the top ranking state on the National Assessment of Education Progress (NAEP) mathematics proficiency measure, invested 3.8 percent of its total taxable resources on education in 2007. In the same year, Mississippi, invested a similar amount, 3.9 percent, yet ranked at the bottom of the NAEP mathematics proficiency measure distribution (Education Week 2010).

expenses or comply with what has been budgeted, or the subnational or school level may not allocate resources productively. Fraud or corruption hinders effective budget execution. Lastly, a lack of transparency in the budgeting process limits access to information on the resources available, weakening the capacity of local communities to exercise scrutiny on the resources allocated and used for the delivery of education services. While well functioning finance systems are not sufficient for academic effectiveness, the extent to which education systems put in place fiscal control mechanisms to ensure that resources budgeted for education are spent in intended ways is a critical factor in school finance systems. Fiscal controls in school finance may include budget implementation/execution reviews, reporting requirements, internal and external audits, public information on school budgets, and enforcement mechanisms.

*Table 1: Summary of core areas in school finance*

<p><b>School conditions and resources</b></p>	<ul style="list-style-type: none"> <li>•What are the basic inputs for all students?</li> <li>•Are there policies in place to ensure that basic educational inputs are provided?</li> <li>•Are there systems to monitor that basic educational inputs are provided to primary and secondary schools?</li> <li>•What are the stated educational goals?</li> <li>•Are there systems to monitor performance goals?</li> <li>•What is the composition of schools in the education system?</li> <li>•How many students are enrolled?</li> </ul>
<p><b>Allocation mechanisms</b></p>	<ul style="list-style-type: none"> <li>•Each year, at the national or subnational level, how is the decision made about how much is going to be spent on education?</li> <li>•What determines the distribution of public sector funding for education to lower levels of government and to schools (public &amp; private, government dependent)?</li> <li>•How is funding allocated for different student groups?</li> <li>• How is education funding monitored?</li> <li>•How much of the education budget is allocated to each level?</li> </ul>
<p><b>Revenue sources</b></p>	<ul style="list-style-type: none"> <li>•Where do revenues for education expenditure come from?</li> <li>•Of the public share, how are these revenues generated?</li> <li>•How much discretion do schools have over the use of revenues?</li> <li>•Does the public sector raise funds for education through school fees?</li> <li>• Is international aid integrated effectively into budgets?</li> </ul>
<p><b>Education spending</b></p>	<ul style="list-style-type: none"> <li>•How big is the education sector?</li> <li>•How much of the total public education budget is allocated to different levels of education?</li> <li>•How much is spent per student at each level of education?</li> <li>•How much is spent on different inputs?</li> <li>•How does spending per student vary within country and across groups of students?</li> </ul>
<p><b>Fiscal control and capacity</b></p>	<ul style="list-style-type: none"> <li>•What are systems in place to track the transfer of resources to different levels of government and to schools?</li> <li>•How is the use of education resources at different levels audited?</li> <li>•What is the capacity for planning and monitoring the education budget?</li> <li>•How is school construction monitored?</li> </ul>

## 2. What matters in school finance?

**In order to enable constructive dialogue and policy reform, it is necessary to establish what matters in school finance in addition to cataloguing how school finance systems work.** A review of the literature on education finance suggests that there are three important principles of a school finance system: adequacy, equity, and efficiency. Adequacy and equity compel systems to provide a minimum amount of necessary resources for all students to learn regardless of their background (Underwood 1995). Efficiency in school finance involves a close look at whether these funds are used to the fullest extent possible. These underlying concepts have guided the development of the SABER-School Finance framework, which provides a framework of policy goals that impact the quality of school finance, and evaluates systems in these influential policy goals.

### Adequacy

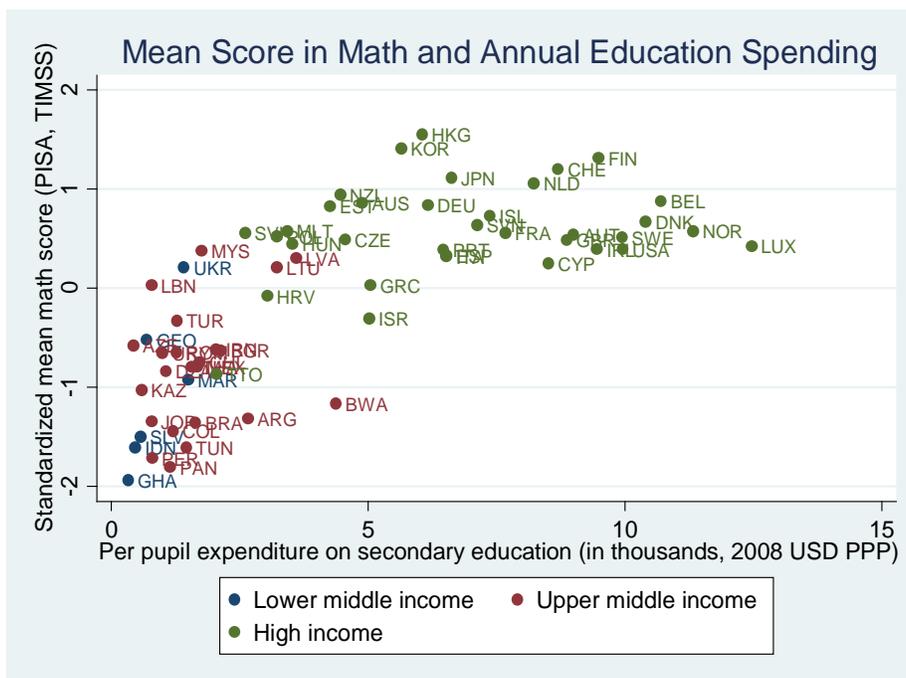
Education finance systems should provide adequate resources to ensure that all students have the opportunity to receive a high quality basic education. Specific basic education standards and goals will vary across countries and the costs of achieving these standards will vary by student (Baker & Green 2008). Yet an overarching goal of all countries should be that education finance systems provide sufficient resources to develop a citizenry capable of making informed decisions as well as acquiring the skills and knowledge to succeed in work and life. Each country has the responsibility of defining an adequate education, given its development goals and available resources, and determining the amount of money that each school would need to achieve this level of achievement, as measured by student outcomes. International assessments of student learning outcomes can also help inform absolute benchmarks that all countries should strive to achieve. Alternatively, given the absence of data on student performance in many low income countries, an adequate education may be defined in terms of a minimum set of required school inputs for learners to have a quality basic education (Reschovsky 2009).

Adequacy is related to the education production function, a model commonly used to approximate the amount of educational inputs necessary for each level of learning outcomes. Inputs can include school resources, teacher quality, family background, student ability, and others, and outcomes measure student achievement. In theory, education finance policymakers set a target for student achievement, and then allocate at least the minimum resources required to meet that goal. However, in practice, this process is less straightforward, as not all inputs can be readily observed and education finance policymakers can only control school-related factors. There are two ways that school finance systems establish the amount of adequate resources. Policymakers can tally the amount necessary to purchase the inputs that are required in theory based on professional judgment, or they can benchmark against the inputs used by a successful school or subnational division.

Although adequacy is a foundational concept in school finance, the extent to which resources matter remains contested. Hanushek (1986)'s well-known analysis of relevant studies tabulated the significance and direction of estimated coefficients from 147 education production functions in published studies to establish which inputs matter for learning outcomes. Citing a preponderance of insignificant effects or inconsistent direction of effects, Hanushek found that there is no "strong or systematic relationship between school expenditures and student performance." Other studies that examine the relationship between funding and results in developing and developed countries suggest that certain inputs (and by extension, education expenditure) have potential for a high impact. Heyneman and Loxley (1983)'s review of school and teacher qualities survey information found that school and teacher quality are more influential in predicting science learning outcomes than family

background in low-income countries, which tend to be low spenders. Fuller and Clarke (1994) examined specific education inputs in their summary of over 100 education production function studies from developing countries, finding consistent effects for textbooks, teacher qualities, and instructional time, among others. An updated survey of this literature from Glewwe and others (2011) finds that in developing countries, some basic inputs do have significant effects on learning outcomes. Resources also matter in developed countries, such as the United States. Ferguson and Ladd (1996) studied student outcomes at the student and district level in Alabama and found significant effects on learning outcomes not only for particular inputs (teacher test scores, teacher education, and class size) but also for instructional spending levels more generally.

*Figure 1: Relationship between learning outcomes and education resources*



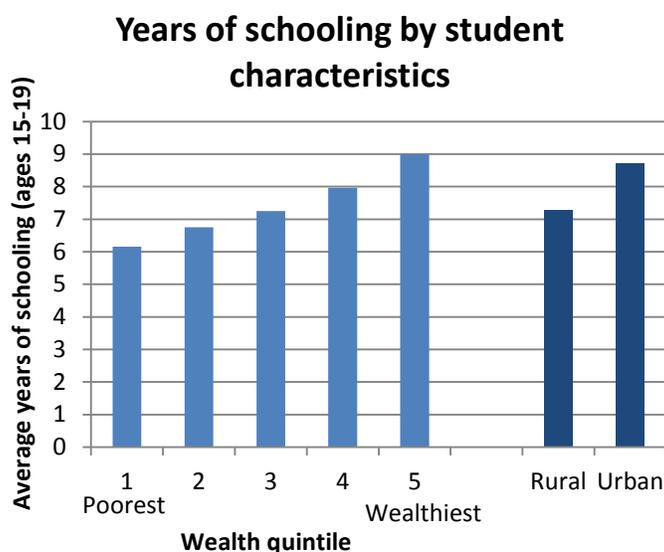
Overall, the literature indicates that education resources can be effective in most settings if managed efficiently, and may have a greater impact in developing countries or other education systems that are low spenders. In Figure 1, a comparison of scores on international assessments and per pupil spending on secondary education demonstrates at least a correlational relationship between the two in practice. Among countries that spend below a certain threshold, learning outcomes increase as education systems spend more.

### Equity

A key goal of education finance systems is to promote equity in educational opportunity. Access to quality education should not depend on a person’s socio-economic background, gender, race, or ethnicity. Yet, multiple non-school factors do influence student learning. Inequalities in attainment associated with socio-economic background are likely to be larger than those due to other influences (Filmer 2008). However, it is possible to compensate for socio-economic differences, and studies show that resources may matter more for children from low-income households than for other children (Baker & Green 2008). Students can also be at a disadvantage depending on their ethnicity, gender, native language, or urban/rural location. Students who speak a different language at home may have more difficulty learning the material, which could result in lower mastery of content. In this case,

resources may be necessary for programs that improve language skills. Location can also be a factor, as costs of inputs may vary: for example, teachers may be more expensive in rural areas, but the cost of school property may be higher in urban areas. In addition, groups that are socially excluded due to ethnic background often have lower attainment rates (Patrinos & Psacharopoulos 1992), which may be a result of historical disadvantage or living in isolated areas. Perhaps most universally, gender still affects attainment, with girls and boys at a disadvantage in different parts of the world, even though great progress has been made to close gender gaps in enrollment, especially at the primary level, but (Filmer 2008; World Bank 2011; Brown & Park 2002). Although socio-economic background is the most influential factor in determining learning outcomes, these other disadvantages also matter, and the interaction of two or more disadvantages can multiply any negative effect. Figure 2 shows that average years of schooling are correlated with socio-economic background and geographic location.

*Figure 2: Equity in educational attainment*



Source: DHS survey data (EdStats)

There are two types of equity in school finance: horizontal and vertical. Horizontal equity promotes the equal treatment of equals, and is used to justify similar levels of funding across comparable schools or subnational divisions. Vertical equity, on the other hand, supports the unequal treatment of unequals (Underwood 1995). For example, appropriately progressive spending may be necessary to provide equivalent education to a student whose native language is different from the language of instruction. School finance systems have a few strategies for promoting equity. There may be a mechanism to equalize education spending across subnational divisions to preserve fiscal neutrality, so the amount of available resources for education is not positively correlated with the wealth of where a student lives. Other systems use student weights to distribute funding, and assume that spending should differ for certain types of students. Equity is typically measured by inputs in terms of the variation in per pupil spending across subnational divisions, the range from the school with highest amount of resources to the school with the lowest, the standard deviation of spending by school, and other methods.

Reducing income and social inequality by improving education outcomes for students from low-income households, reducing achievement gaps between students from advantaged and disadvantaged backgrounds, minority and majority groups, and girls and boys, is often considered the responsibility of

the government (World Bank 2003). A fundamental responsibility of central governments, where the commitment to promote equity across various groups can take precedence over local interests, is ensuring equity in educational opportunity.

## Efficiency

Efficient education systems require that systems invest in those inputs with the largest marginal return, as measured by student outcomes, given a country's particular stage of development. The need to increase and sustain educational access and quality in light of adverse macroeconomic conditions is a huge challenge for policymakers—in particular in developing countries where education expenses are often the most important item in the budget. Given the growth in enrollments and unprecedented fiscal pressures, today it is perhaps more important than ever before that governments, providers and beneficiaries use educational resources in a manner that is transparent, accountable, and utilizes good governance.

An efficient school finance system achieves higher learning outcomes with the same amount of resources. This can occur if two comparable education systems have the same test scores, but one has a lower cost per student, or if two systems have the same cost of provision, but one has higher test scores. The degree of efficiency in a school finance system will impact future allocations: if resources are not used to their potential in the present, adding additional resources will not necessarily improve learning outcomes. Lack of efficiency in school finance systems can be the reason why there is no clear relationship between expenditure and educational outcomes.

Efficiency is commonly measured by unit costs of educating a student, as well as process outcomes of repetition rates, class size, leakages in public expenditure, and teacher absenteeism. Inefficiencies in public spending on education can appear for several reasons. First, data can be misinterpreted if school finance systems that are more in need of resources spend more but still have lower learning outcomes, which may occur in poor urban district or remote rural areas. Second, education spending can affect some groups differently. The increase of learning outcomes associated with spending on students with special needs may be quite small, for example. Third, the composition of spending may matter. Non-teacher salary inputs can be up to 10 times as efficient in terms of producing student outcomes (Pritchett & Filmer 1999). Lastly, and with the most implications for school finance systems, the effectiveness of public spending influences how efficiently resources are used (World Bank 2003).

To perform efficiently, school finance systems must support the provision of educational services with institutional arrangements. Additional governance measures are necessary to create accountability because no market incentives exist to encourage schools and education authorities to provide learning opportunities as efficiently as possible. The 2004 WDR, *Making Services Work for Poor People*, explains this in terms of a lack of client power. When a good such as education is publicly provided, the direct feedback on performance that occurs in the market does not happen. Instead, there is a “long route of accountability” from the school finance policymaker to the education administration to the schools, where children ultimately learn. A lack of “compact” is one reason why accountability trail can break down. The school finance system should clearly communicate and enforce responsibilities of providing education services from the central administration to the school level.

**Adequacy, equity, and efficiency are interrelated.** Necessary educational resources depend on education goals and local context, but every education finance system is responsible for determining an adequate threshold of resources to provide. While adequacy in education finance is an absolute concept that ensures a minimum threshold of resources to produce certain learning outcomes, systems should also examine variation in available financial resources and learning outcomes across students

and promote equity in learning opportunities for all students. The foundational concepts of adequacy and equity determine the amount of funding that is available, but do not consider how well resources are used. Finally, efficiency guides school finance systems to achieve more learning outcomes with the same amount of resources through effective public financial management.

## School Finance Policy Goals

**Based on available research related to these three principles, SABER-School Finance chose policy goals that reflect actionable ways that school finance systems can follow these three well-known concepts in school finance: adequacy, equity, and efficiency.** In identifying the policy goals, levers to achieve them, and indicators to assess an education system's progress toward the goals, SABER-School Finance relied on the latest research evidence. Although much research has focused on school finance, no single source provides holistic guidance on what matters. To take advantage of as much relevant research as possible, the team considered three types of available evidence: causal and semi-causal analyses, correlational studies, and qualitative analyses.<sup>5</sup>

- **Causal and semi-causal analyses.** First, the team conducted a thorough literature review of the experimental and quasi-experimental research on the effect of school finance policies on student achievement. This review of the evidence base on school finance policies prioritized those studies whose methodology allows them to distinguish the effects of interventions from other factors that may confound those effects, rather than merely identifying associations between policies and outcomes. That is, the studies reviewed allow for making inferences about the fact that it is the specific intervention under study, and not other factors, what causes the improvement in student outcomes.
- **Correlational studies.** While being able to distinguish the causal effect of specific policies is crucial to identify those policies that have proven to work to improve student outcomes in specific settings, it is also important to think broadly about the nature of the evidence that is relevant for system-wide policies. The findings derived from impact evaluations tend to be circumscribed to the specific circumstances under which the program implementation takes place. The results from this impact evaluation can be safely extrapolated to other schools or even similar contexts, but only to a limited extent. While they may provide causal evidence on what happens when such a program is implemented in a sub-set of schools, the results cannot be directly extrapolated to a system-wide conclusion. Causal analyses are much harder to perform in the case of system-wide policies. For this reason, the SABER-School Finance team also reviewed, in addition to the rigorous causal analyses mentioned earlier, other empirical studies that provide information on the associations between certain aspects of school finance and student learning. Although these studies are weaker in terms of making causal inferences about what works, they complement causal analyses in that they provide information on how successful systems deal with various policy options regarding school finance policy, and provide the system-wide perspective that is lacking in the case of impact evaluations.
- **Qualitative analyses.** The third source of evidence used in the development of the SABER-School Finance framework came from descriptive case studies of school finance systems with high learning outcomes. School finance is not the only factor that determines student achievement in these systems, but documentation of real world school finance policies and

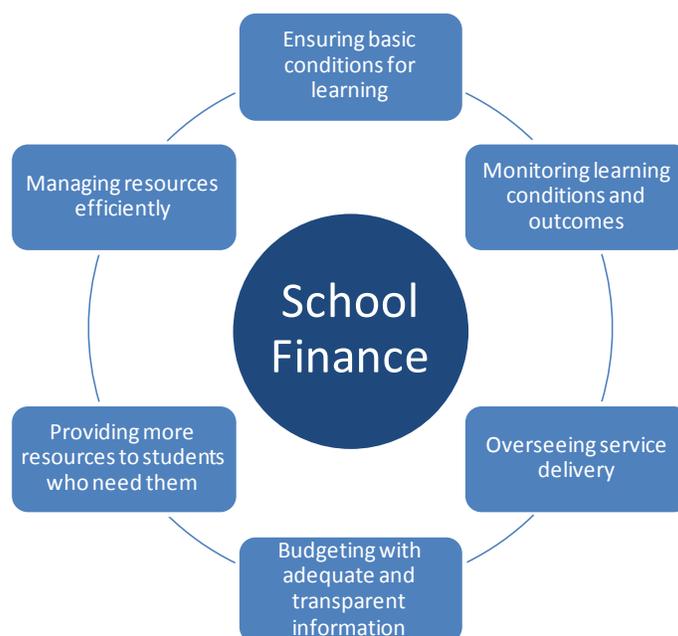
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<sup>5</sup> This approach is similar to the evidence review conducted by the SABER-Teachers team.

practices of successful systems adds to existing knowledge on what works in school finance. Causal studies rarely allow for system-wide interventions, and correlational studies require extensive quantitative data. Qualitative analyses, on the other hand, are able to describe effective trends in school finance policy that cannot be identified through empirical analysis. This is particularly true for some aspects of public financial management. For example, most school finance systems with high levels of student learning require all levels of government to report education expenditure so that funds can be allocated efficiently, but no direct link between reporting and educational outcomes has been established. This type of study provides valuable information on the ways in which high-performing education systems combine various school finance policies to achieve good education results.

**Available research suggested six policy goals that school finance systems should meet in order to address issues of adequacy, equity, and efficiency (see Figure 3).** To represent adequacy, or how well school finance systems provide adequate resources to ensure that all students have the opportunity to receive a high quality education, the SABER-School Finance team selected two goals: (i) Ensuring basic conditions for learning; and (ii) Monitoring learning conditions and outcomes. To measure equity, or how school finance systems seek to improve education outcomes for students from disadvantaged backgrounds, the team chose one goal: Providing more resources to students who need them. Lastly, to evaluate efficiency, or how school finance systems promote the effective use of resources, the team decided on three goals: (i) Overseeing service delivery; (ii) Budgeting with adequate and transparent information; and (iii) Managing resources efficiently. These policy goals are widely shared across countries, and will allow school finance systems to provide the necessary resources to facilitate learning for all children.<sup>6</sup>

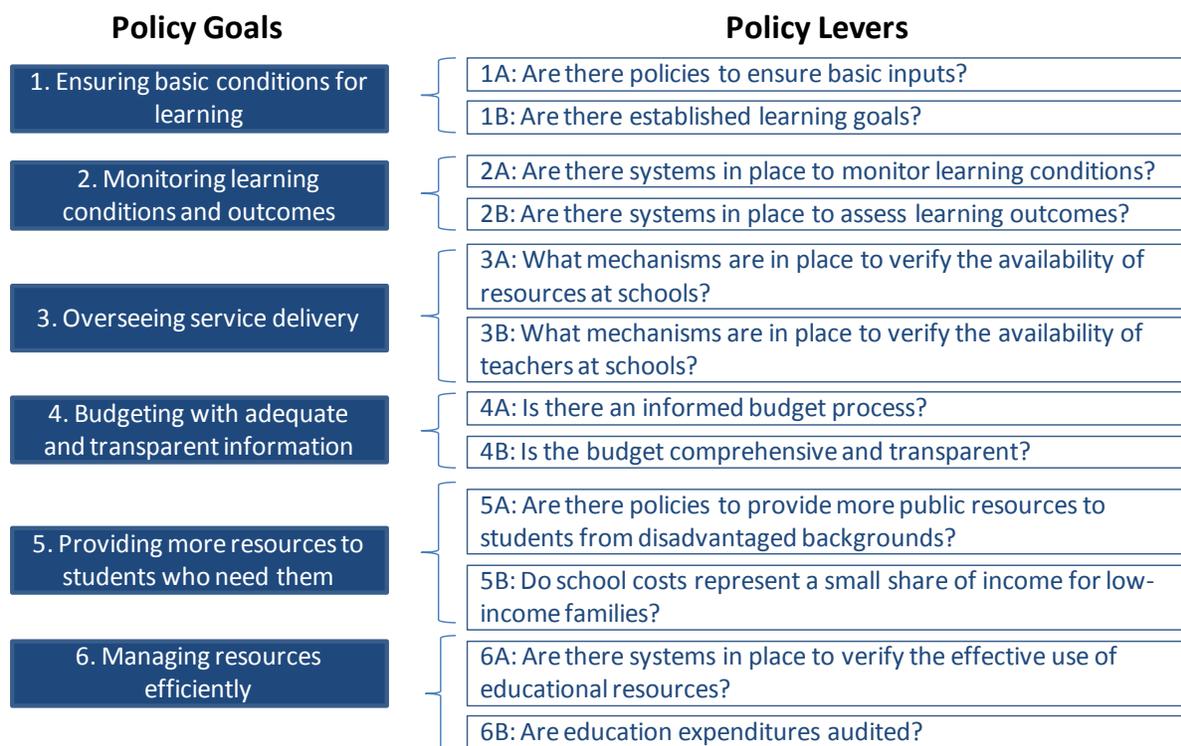
*Figure 3: SABER-School Finance policy goals*



<sup>6</sup> For several indicators that relate to efficiency, the team consulted the Public Expenditure and Financial Accountability (PEFA) Performance Management Framework (PFM) to adapt public financial management indicators to the education sector.

Using a subset of the information collected in the core areas, the SABER-School Finance team will assess a school finance system’s progress in the six school finance policy goals. Ratings in these goals will serve as a benchmark of the quality of school finance systems, and allow for constructive dialogue around school finance system improvements or the commission of complementary studies.<sup>7</sup> Figure 4 summarizes the levers, or actions a government can take to improve school finance systems, for each of the six SABER-School Finance policy goals. Progress in each lever is measured by an average of outcomes in relevant indicators, which are presented at the end of this section in Table 14. Policymakers can use these assessments to prioritize potential improvements and make informed choices about school finance policy. In what follows, we discuss the evidence supporting each policy goal and lever.

Figure 4: Summary of School Finance policy goals and policy levers



### Policy Goal 1: Ensuring basic conditions for learning

School finance systems should create an environment that supports and encourages learning. Although standards of student achievement, as well as the costs to reach those standards may vary across countries and student groups, there is a minimum amount of resources required to produce learning outcomes. While precise figures of this minimum amount of resources have proved difficult to estimate, if students do not have access to a fundamental set of resources they will not be able to acquire the knowledge and skills necessary “to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions, and to continue learning,” that describe high quality education in the Jomtien Declaration on Education For All.

<sup>7</sup> Although SABER-School Finance delivers guidance on policies, the tool attempts to capture policy in practice by goal when possible.

SABER-School Finance uses two policy levers to assess progress in this policy goal: (A) Are there policies to ensure basic inputs?; and (B) Are there established learning goals? Evidence used to inform the choice of lever and indicators is summarized below.

### **Policy Lever 1A: Are there policies to ensure basic inputs?**

A review of government policies on provision of inputs reveals the level of commitment to improving the basic learning environment in schools. Having policies in place is the first step to ensuring coverage for all students. The process of translating inputs into learning outcomes is very complex, but school finance policies should at least stipulate which inputs should be provided so that funding may be allocated appropriately. Many school finance systems allocate resources on a per-student or per-school basis to supply sufficient inputs with a foundation grant. Although there is no way to precisely estimate the cost of education, the inputs these grants intend to provide should be explicitly defined so that funding may approximately cover the cost.

At a minimum, policies should provide basic infrastructure, teachers, and instructional materials. After children are in school, the quality of school infrastructure can affect student learning, sometimes even more than other inputs (Harbison & Hanushek 1992; Bacolod & Tobias 2006; Lavy 1996). In some settings, the better visible quality of a school may even make parents more likely to send their children to school (Glewwe 1994). Better school infrastructure also makes it easier to attract and retain better teachers through better working conditions, and improves teacher attendance (Chaudhury et al. 2006). Three aspects of basic infrastructure have shown to contribute to student learning: potable water (Miguel & Kremer 2004); functional hygienic facilities, e.g. toilets or latrines as appropriate; and electricity (Glewwe et al. 1995; Glewwe et al. 2011). The type of requirements for becoming a public school teacher helps explain the quality of the teaching force and the existence of teacher shortages or an excess supply of teachers. No single observable can predict teacher effectiveness, but a combination of multiple measures can help identify good teachers (Rockoff et al. 2009; Goldhaber & Brewer 1997).

In addition to physical infrastructure and human capital, policies should provide teaching and learning materials, including libraries, textbooks, and computers. An analysis of education expenditures shows that these resources may be even more cost-effective than teachers (Pritchett & Filmer 1999). Some evidence shows that textbooks can have a significant impact on learning outcomes (Glewwe et al. 2007; Jamison et al. 1981; Heyneman et al. 1984). Libraries may also provide access to textbooks and other learning materials. Although controversy exists around ICT for education, some findings show that computers, when used correctly, create learning gains in some subjects, particularly mathematics (Banerjee et al. 2005; Barrow et al. 2008). In any event, the ability to engage with content using computer skills is increasingly important in today's economy, and school may be the first place where students from disadvantaged socio-economic backgrounds or low-income countries are exposed to computers (OECD 2011).

Table 2: Evidence for Policy Lever 1A, Are there policies to ensure basic inputs?

Indicator	Evidence	Methodology
1. Is there is a clearly stated policy to require that basic infrastructure is provided in primary schools?	Harbison, R. W. and Hanushek, E. A. (1992). <i>Educational Performance of the Poor: Lessons from Rural Northeast Brazil</i> . Washington, DC: The World Bank.	Semi-causal: Difference in difference, instrumental variables, correction for selection
1. Is there is a clearly stated policy to require that basic infrastructure is provided in primary schools? (continued)	Bacolod, M. P. and Tobias, J. L. "Schools, school quality and achievement growth: Evidence from the Philippines." <i>Economics of Education Review</i> 25(6), 619-632.	Correlational: Value-added regression analysis with controls for initial achievement and student demographics
	Chaudhury, N., Hammer, J., Kremer, M., Muralidharan, K., and Rogers, F. H. (2006). "Missing in Action: Teacher and Health Worker Absence in Developing Countries." <i>The Journal of Economic Perspectives</i> 20(1), 91-116.	Correlational: hierarchical linear model estimation
	Miguel, E. and Kremer, M. (2004). "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities." <i>Econometrica</i> 72(1), 159-217.	Causal: Randomized control trial
	Glewwe, P., Grosh, M., Jacoby, H. and Lockheed, M. (1995). "An eclectic approach to estimating the determinants of achievement in Jamaican primary education." <i>World Bank Economic Review</i> , 9(2) 231-258.	Correlational: Regression analysis with controls for family background and correction for selection
	Glewwe, P. W., Hanushek, E. A., Humpage, S. D., and Renato, R. (2011). "School Resources and Educational Outcomes in Developing Countries: A Review of the Literature from 1990 to 2010." <i>NBER Working Paper 17554</i> . Cambridge, MA: National Bureau of Economic Research (NBER).	Meta-analysis of previous causal, semi-causal, and correlational research
2. Is there is a clearly stated policy to require that teaching and learning materials are provided in primary schools?	Pritchett, L. and Filmer, D. (1999). "What education production functions really show: a positive theory of education expenditures." <i>Economics of Education Review</i> 18(2), 223-239.	Review of previous causal, semi-causal, and correlational research
	Glewwe, P., Kremer, M. and Moulin, S. (2007). "Many Children Left Behind? Textbooks and Test Scores in Kenya." <i>NBER Working Paper 13300</i> . Cambridge, MA: National Bureau of Economic Research (NBER).	Causal: Randomized control trial

Indicator	Evidence	Methodology
	Jamison, Dean T., Barbara Searle, Klaus Galda, and Stephen P. Heyneman. 1981. An Experimental Study of the Impact of Textbooks and Radio on Achievement. <i>Journal of Educational Psychology</i> 73 (4), 556-567.	Causal: Randomized control trial
Indicator	Evidence	Methodology
2. Is there is a clearly stated policy to require that teaching and learning materials are provided in primary schools? (continued)	Heyneman, S. P., Jamison, D. T., and Montenegro, X. (1984). "Textbooks in the Philippines: Evaluation of the Pedagogical Impact of a Nationwide Investment." <i>Educational Evaluation and Policy Analysis</i> 6(2), 139-150.	Causal: Randomized control trial
	Banerjee, A., Cole, S., Duflo, E., and Linden, L. (2005). "Remedying Education: Evidence from Two Randomized Experiments in India." <i>NBER Working Paper 11904</i> . Cambridge, MA: National Bureau of Economic Research (NBER).	Causal: Randomized control trial
	Barrow, L., Markman, L., and Rouse, C. (2008). "Technology's Edge: The Educational Benefits of Computer-Aided Instruction." <i>NBER Working Paper 14240</i> . Cambridge, MA: National Bureau of Economic Research (NBER).	Causal: Randomized control trial
	OECD. (2011). "PISA 2009 Results: Students on Line: Digital Technologies and Performance (Volume VI)." Paris, France: Organization for Economic Co-Operation and Development (OECD).	Qualitative: Analysis of trends in high-performing systems
3. What are the minimum educational requirements to become a primary school teacher?	Rockoff, J. E., Jacob, B. A., Kane, T. J., and Staiger, D. O. (2009). "Can You Recognize an Effective Teacher When You Recruit One?". New York, NY: Columbia Business School.	Correlational: Regression analysis with controls for school characteristics and previous student achievement
	Goldhaber, D., and Brewer, D.J. (1997). "Why Don't Schools and Teachers Seem to Matter? Assessing the Impact of Unobservables on Educational Productivity." <i>Journal of Human Resources</i> 32(3), 505-523.	Correlational: Multiple regression analysis with controls for student background and school characteristics
4. Is there is a clearly stated policy to require that basic infrastructure is provided in secondary schools?	Harbison, R. W. and Hanushek, E. A. (1992). <i>Educational Performance of the Poor: Lessons from Rural Northeast Brazil</i> . Washington, DC: The World Bank.	Semi-causal: Difference in difference, instrumental variables, correction for selection
	Bacolod, M. P. and Tobias, J. L. "Schools, school quality and achievement growth: Evidence from the Philippines." <i>Economics of Education Review</i> 25(6),	Correlational: Value-added regression analysis with controls

Indicator	Evidence	Methodology
	619-632.	for initial achievement and student demographics
Indicator	Evidence	Methodology
4. Is there is a clearly stated policy to require that basic infrastructure is provided in secondary schools? (continued	Chaudhury, N., Hammer, J., Kremer, M., Muralidharan, K., and Rogers, F. H. (2006). "Missing in Action: Teacher and Health Worker Absence in Developing Countries." <i>The Journal of Economic Perspectives</i> 20(1), 91-116.	Correlational: Hierarchical linear model estimation
	Miguel, E. and Kremer, M. (2004). "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities." <i>Econometrica</i> 72(1), 159-217.	Causal: Randomized control trial
	Glewwe, P., Grosh, M., Jacoby, H. and Lockheed, M. (1995). "An eclectic approach to estimating the determinants of achievement in Jamaican primary education." <i>World Bank Economic Review</i> , 9(2) 231-258.	Correlational: Regression analysis with controls for family background and correction for selection
	Glewwe, P. W., Hanushek, E. A., Humpage, S. D., and Renato, R. (2011). "School Resources and Educational Outcomes in Developing Countries: A Review of the Literature from 1990 to 2010." <i>NBER Working Paper 17554</i> . Cambridge, MA: National Bureau of Economic Research (NBER).	Review of previous causal, semi-causal, and correlational research
5. Is there is a clearly stated policy to require that teaching and learning materials are provided in secondary schools?	Pritchett, L. and Filmer, D. (1999). "What education production functions <i>really</i> show: a positive theory of education expenditures." <i>Economics of Education Review</i> 18(2), 223-239.	Review of previous causal, semi-causal, and correlational research
	Glewwe, P., Kremer, M. and Moulin, S. (2007). "Many Children Left Behind? Textbooks and Test Scores in Kenya." <i>NBER Working Paper 13300</i> . Cambridge, MA: National Bureau of Economic Research (NBER).	Causal: Randomized control trial
	Jamison, Dean T., Barbara Searle, Klaus Galda, and Stephen P. Heyneman. 1981. An Experimental Study of the Impact of Textbooks and Radio on Achievement. <i>Journal of Educational Psychology</i> 73 (4), 556-567.	Causal: Randomized control trial
	Heyneman, S. P., Jamison, D. T., and Montenegro, X. (1984). "Textbooks in the Philippines: Evaluation of the Pedagogical Impact of a Nationwide Investment." <i>Educational Evaluation and Policy Analysis</i> 6(2), 139-150.	Causal: Randomized control trial

Indicator	Evidence	Methodology
	Banerjee, A., Cole, S., Duflo, E., and Linden, L. (2005). "Remedying Education: Evidence from Two Randomized Experiments in India." <i>NBER Working Paper 11904</i> . Cambridge, MA: National Bureau of Economic Research (NBER).	Causal: Randomized control trial
Indicator	Evidence	Methodology
5. Is there is a clearly stated policy to require that teaching and learning materials are provided in secondary schools? (continued)	Barrow, L., Markman, L., and Rouse, C. (2008). "Technology's Edge: The Educational Benefits of Computer-Aided Instruction." <i>NBER Working Paper 14240</i> . Cambridge, MA: National Bureau of Economic Research (NBER).	Causal: Randomized control trial
	OECD. (2011). "PISA 2009 Results: Students on Line: Digital Technologies and Performance (Volume VI)." Paris, France: Organisation for Economic Co-Operation and Development (OECD).	Qualitative: Analysis of trends in high-performing systems
6. What are the minimum educational requirements to become a secondary school teacher?	Rockoff, J. E., Jacob, B. A., Kane, T. J., and Staiger, D. O. (2009). "Can You Recognize an Effective Teacher When You Recruit One?". New York, NY: Columbia Business School.	Correlational: Regression analysis with controls for school characteristics and previous student achievement
	Goldhaber, D., and Brewer, D.J. (1997). "Why Don't Schools and Teachers Seem to Matter? Assessing the Impact of Unobservables on Educational Productivity." <i>Journal of Human Resources</i> 32(3), 505-523.	Correlational: Multiple regression analysis with controls for student background and school characteristics

### Policy Lever 1B: Are there established learning goals?

Defining learning goals provides guidance to the education system on how to use its resources. System-wide performance goals allow policymakers, administrators, and teachers to align their actions toward meeting common objectives so that all students learn. For example, in Ontario, Canada, education goals include improving performance on mathematics and reading assessments, and increasing the secondary school graduation rate (Education Quality and Accountability Office 2010). Other countries with well-defined performance goals (such as France, Japan, and the Netherlands) perform well on international assessments (Resnick et al. 1995). Specific and limited performance goals, such as proficient scores on a national assessment or students that are well-prepared to enter tertiary education, also allow school finance systems to set targets and measure success in delivering quality education.

*Table 3: Evidence for Policy Lever 1B, Are there established learning goals?*

Indicator	Evidence	Methodology
1. Are there system-wide performance goals at the primary level?	Resnick, L., Nolan, K. and Resnick, D. (1995). "Benchmarking Education Standards." <i>Educational Evaluation and Policy Analysis</i> 17 (4): 438–61.	Qualitative: Benchmarking analysis
2. Are there system-wide performance goals at the secondary level?	Resnick, L., Nolan, K. and Resnick, D. (1995). "Benchmarking Education Standards." <i>Educational Evaluation and Policy Analysis</i> 17 (4): 438–61.	Qualitative: Benchmarking analysis

### **Policy Goal 2: Monitoring learning conditions and outcomes**

Accurate information on learning conditions and outcomes is necessary to inform policy, and policymakers are more likely to use data to drive decision-making as more become consistently available (Crouch 1997). Objective data are particularly useful in the context of challenging political economy. Monitoring learning conditions and student achievement will also allow school finance systems to hold schools accountable and measure efficiency in the use of resources. Without knowledge on which inputs are available and how these inputs translate into learning outcomes, it will be difficult for school finance systems to allocate funds strategically.

SABER-School Finance uses two policy levers to assess progress in this policy goal: (A) Are there systems in place to monitor learning conditions?; and (B) Are there systems in place to assess learning outcomes?

#### **Policy Lever 2A: Are there systems in place to monitor learning conditions?**

Policies to provide basic educational inputs do not guarantee that these inputs are available in all schools, so school finance systems must track the extent to which these policies are implemented. A system to monitor education inputs can be a tool for accountability in the use of funding at the school level as well as a way to improve budget plans. Policymakers will be able to use knowledge of basic infrastructure, teacher, and teaching and learning materials availability to redirect resources to the neediest schools or to take action with schools that do not provide the desired inputs. Ultimately, monitoring learning conditions is only useful if the data are actually used by the actors in school finance system (Amin et al. 2008).

To provide relevant feedback for decision making, the education system should collect information on basic educational inputs on a regular basis. A school census is one proven way to centrally compile this information. This allows policymakers to allocate resources where they are needed most and also hold school accountable for the use of resources, such as teacher salary. Availability of administrative information on current enrollment and teacher information at the school level also allows budgets to be systematically allocated to represent school and student needs (Porta & Arcia 2011). In addition, monitoring student attendance is especially important for education policymakers to know if learning is possible, regardless of other education spending and policies. Students who are chronically absent are at risk for poor performance, dropout, and lower income in the longer term (Sparks 2010). It is also important for education authorities to know how many students are present in cases where schools receive funding on a per student basis.

*Table 4: Evidence for Policy Lever 2A, Are there systems in place to monitor learning conditions?*

Indicator	Evidence	Methodology
1. What is the scope of available data for basic infrastructure, teaching and learning materials, and qualified teachers?	Crouch, L. (1997). "Sustainable EMIS: Who is accountable?" In D. Chapman, L. Mählck, and A. Smulders (Eds.) <i>From Planning to Action: Government initiatives for improving school-level practices</i> . Paris: UNESCO International Institute for Educational Planning.	Qualitative: Summary of best practices
2. How frequently is a school census produced?	Amin, S., Das, J., and Goldstein, M. (Eds.). (2008). <i>An introduction to methodologies for measuring service delivery in education</i> . Washington DC: The World Bank.	Qualitative: Summary of best practices
3. Is administrative school data centrally reported in a timely manner?	Porta, E. and Arcia, G. (2011). "Improving Information Systems for Planning and Policy Dialogue: The SABER EMIS Assessment Tool." Washington DC: The World Bank.	Qualitative: Summary of best practices
3a. Is student attendance reported in a timely manner?	Sparks, S. (2010). "Districts Begin Looking Harder at Absenteeism." <i>Education Week</i> , 20(6), 1-13.	Qualitative: Case study

**Policy Lever 2B: Are there systems in place to assess learning outcomes?**

Large-scale student achievement assessments allow education systems to gather and evaluate information on what students know (Clarke 2011). Verifying students' knowledge is becoming increasingly important with the recently renewed emphasis on measuring the quality of education through learning outcomes, not simply the availability of school inputs or quantity of schooling (Independent Evaluation Group 2006). Assessments can effectively hold policymakers accountable to parental and student stakeholders, and can be successfully linked to incentives for teachers at the school level (Carnoy & Loeb 2002; Hanushek & Raymond 2002). Regular assessments, such as Provinha in Brazil, help to illustrate trends over time and provide consistent information to education policymakers, whereas one-time assessments, such as worldwide Early Grade Reading Assessments (EGRA), are more useful as shocks to motivate education reform. The extent to which exams cover all students in all grades also influences the scope of information available to policymakers on student performance (Clarke 2011), and the degree of disaggregation of student assessment results (for example, by student group or school) influences how well data can be used to inform school finance decisions (Ferrer 2006). Most importantly, assessment results should be available to those in the planning unit so they can make information on resource allocations.

*Table 5: Evidence for Policy Lever 2B, Are there systems in place to assess learning outcomes?*

Indicator	Evidence	Methodology
1. How often are large-scale student achievement assessments administered?	Ferrer, G. (2006). <i>Educational Assessment Systems in Latin America: Current Practice and Future Challenges</i> . Washington, DC: PREAL.	Qualitative: Case studies
2. Who participates in the large-scale student achievement assessments program?	Ferrer, G. (2006). <i>Educational Assessment Systems in Latin America: Current Practice and Future Challenges</i> . Washington, DC: PREAL.	Qualitative: Case studies
3. Does the large-scale student achievement assessment program target grades in each level of schooling?	Ferrer, G. (2006). <i>Educational Assessment Systems in Latin America: Current Practice and Future Challenges</i> . Washington, DC: PREAL.	Qualitative: Case studies
4. Do results from the large-scale student achievement assessment allow for disaggregation by student characteristics?	Ferrer, G. (2006). <i>Educational Assessment Systems in Latin America: Current Practice and Future Challenges</i> . Washington, DC: PREAL.	Qualitative: Case studies
5. Are assessment data accessible and useable by those in the planning unit?	Carnoy, M., and S. Loeb. (2002). "Does External Accountability Affect Student Outcomes? A Cross-State Analysis." <i>Educational Evaluation and Policy Analysis</i> 24(4), 305-331.	Correlational: Multiple regressions with controls
	Hanushek, E. A. and Raymond, M. E. (2002). <i>Lessons about the Design of State Accountability Systems</i> . Cambridge MA: Harvard University.	Qualitative: Summary of best practices

### **Policy Goal 3: Overseeing service delivery**

In addition to creating and monitoring education policies, an efficient school finance system should confirm that resources are converted into learning opportunities at the provider level. Many existing indicators measure educational inputs and outcomes, without considering the middle step of adequate service delivery. Reported public expenditure on education does not guarantee that education policy has been implemented (Reinikka & Svensson 2004), so it is imperative that school finance systems have mechanisms to measure the quality of service delivery at the school.

SABER-School Finance uses two policy levers to assess progress in this policy goal: (A) What mechanisms are in place to verify the delivery of resources at schools?; and (B) What mechanisms are in place to verify the availability of human resources at schools?

#### **Policy Lever 3A: What mechanisms are in place to verify the delivery of resources at schools?**

Research shows that increases in instructional time are linked to learning gains across subjects and settings (Lavy 2010; Bellei 2009; Cerdan-Infantes & Vermeersch 2007). School finance

systems should make sure that resources are used to the most efficient extent possible, including how much time children spend in school. In addition, delays in disbursement of textbooks hinder learning, and are especially common at the beginning of the school year. Students that have access to learning materials, such as textbooks, have better learning outcomes (Fuller & Clarke 1994; Michaelowa 2001). Reforms in both developed and developing countries have been necessary to provide textbooks to schools on time (Leung 2005; Labbé 2007). School finance systems should be aware of the number of schools that have the prescribed textbooks in a timely manner.

School construction expenditures should also be monitored throughout the construction process to hold the project's expenditures to the estimated budget. Monitoring expenditures allows for the documentation of unforeseen expenses as well as the opportunity to save money if possible. In addition, building schools is highly subject to corruption because builders tend to have more knowledge about the costs, which vary from school to school, than the financiers do (Collier & Hoeffler 2005).

*Table 6: Evidence for Policy Lever 3A, What mechanisms are in place to verify the delivery of resources at schools?*

Indicator	Evidence	Methodology
1. Are there mechanisms to track how many effective school days are in the primary school year?	Lavy, V. (1996). "School supply constraints and children's educational outcomes in rural Ghana." <i>Journal of Development Economics</i> (51)2: 291-314.	Correlational: Regression analysis with controls
	Bellei, C. (2009). "Does lengthening the school day increase students' academic achievement? Results from a natural experiment in Chile." <i>Economics of Education Review</i> (28), 629-640.	Semi-causal: Difference in difference
	Cerdan-Infantes, P. and Vermeersch, C. (2007). "More Time is Better: An Evaluation of the Full-Time School Program in Uruguay." <i>World Bank Policy Research Paper 4167</i> . Washington, DC: The World Bank.	Semi-causal: Propensity score matching
Indicator	Evidence	Methodology
2. Are there mechanisms to track how many effective school days are in the secondary school year?	Lavy, V. (1996). "School supply constraints and children's educational outcomes in rural Ghana." <i>Journal of Development Economics</i> (51)2: 291-314.	Correlational: Regression analysis with controls
	Bellei, C. (2009). "Does lengthening the school day increase students' academic achievement? Results from a natural experiment in Chile." <i>Economics of Education Review</i> (28), 629-640.	Semi-causal: Difference in difference
	Cerdan-Infantes, P. and Vermeersch, C. (2007). "More Time is Better: An Evaluation of the Full-Time School Program in Uruguay." <i>World Bank Policy Research Paper 4167</i> . Washington, DC: The World Bank.	Semi-causal: Propensity score matching
3. Are there	Fuller, B. and Clarke, P. (1994). "Raising School	Review of previous

Indicator	Evidence	Methodology
mechanisms to track the proportion of primary schools that had prescribed textbooks within the first month of school?	Effects while Ignoring Culture? Local Conditions and the Influence of Classroom Tools, Rules, and Pedagogy." <i>American Educational Research Association 64</i> (1), 119-157.	causal, semi-causal, and correlational research
	Michaelowa, K. (2001). "Primary Education Quality in Francophone Southern Africa: Determinants of Learning Achievement and Efficiency Conditions." <i>World Development (29)</i> 10, 1699-1716.	Correlational: Regression analysis with controls
	Leung, G. (2005). "Textbook Count and Civil Society Participation: Effecting System Reforms in the Department of Education." Makati, the Philippines: Ateneo School of Government.	Qualitative: Case study
	Labbé, T. (2007). "Rhee Races to Deliver Most Books by Monday." <i>Washington Post</i> : Aug. 21.	Qualitative: Case study
4. Are there mechanisms to track the proportion of secondary schools that had prescribed textbooks within the first month of school?	Fuller, B. and Clarke, P. (1994). "Raising School Effects while Ignoring Culture? Local Conditions and the Influence of Classroom Tools, Rules, and Pedagogy." <i>American Educational Research Association 64</i> (1), 119-157.	Review of previous causal, semi-causal, and correlational research
	Michaelowa, K. (2001). "Primary Education Quality in Francophone Southern Africa: Determinants of Learning Achievement and Efficiency Conditions." <i>World Development (29)</i> 10, 1699-1716.	Correlational: Regression analysis with controls
	Leung, G. (2005). "Textbook Count and Civil Society Participation: Effecting System Reforms in the Department of Education." Makati, the Philippines: Ateneo School of Government.	Qualitative: Case study
	Labbé, T. (2007). "Rhee Races to Deliver Most Books by Monday." <i>Washington Post</i> : Aug. 21.	Qualitative: Case study
Indicator	Evidence	Methodology
5. How is school construction expenditure monitored?	Collier, P. and Hoeffler, A. (2005). "The economic costs of corruption in infrastructure." In Transparency International (Ed.) <i>Global Corruption Report 2005</i> . London: Pluto Press.	Qualitative: Trends in school finance systems

**Policy Lever 3B: What mechanisms are in place to verify the availability of human resources at schools?**

Instruction, and therefore teacher attendance, is the most crucial factor in the use of education resources; student learning will not occur if teachers are not present. However, research from developed and developing countries suggests that teacher absenteeism can reach high levels and negatively affect learning (Chaudhury et al. 2006; Duflo & Hanna 2005). Even when teachers are present at schools, they may arrive to class late, leave early, or not teach (Brunts et al. 2010).

Teacher absenteeism can be a systemic problem that is not well-documented. Administrative records do not always correlate to actual attendance, nor are salaries adjusted accordingly, making the effective monitoring and enforcing of teacher attendance policies imperative. Education is often provided far from non-school education authorities that pay teacher salaries, so monitoring when teachers are present is an essential mechanism to improve attendance rates and make teachers accountable (World Bank 2003). Education resources are wasted when teachers are paid but do not attend school, especially because teacher salaries often comprise the majority of education expenditures. To reduce teacher absenteeism, the least that a system can do is monitor attendance and establish consequences for absenteeism.

If assigned teachers are absent, school finance systems should provide substitute teachers to ensure that students can still learn. In low-income countries, substitutes rarely replace absent teachers, and so students are not able to learn. In addition, higher-income areas have lower absence rates, which increase inequality in learning opportunity (Chaudhury et al. 2006).

*Table 7: Evidence for Policy Lever 3B, What mechanisms are in place to verify the availability of human resources at schools?*

Indicator	Evidence	Methodology
1. How is teacher attendance monitored?	World Bank. (2003). <i>World Development Report 2004: Making Services Work for Poor People</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices
	Duflo, E. and Hanna, R. (2005). "Monitoring Works: Getting Teachers to Come to School." <i>NBER Working Paper 11880</i> . Cambridge, MA: National Bureau of Economic Research (NBER).	Causal: Randomized control trial
Indicator	Evidence	Methodology
2. Is there a policy to ensure that substitute teachers are provided when teachers are absent?	Chaudhury, N., Hammer, J., Kremer, M., Muralidharan, K., and Rogers, F. H. (2006). "Missing in Action: Teacher and Health Worker Absence in Developing Countries." <i>The Journal of Economic Perspectives</i> 20(1), 91-116.	Correlational: Hierarchical linear estimation model
3. Are there penalties for teacher absenteeism?	Duflo, E. and Hanna, R. (2005). "Monitoring Works: Getting Teachers to Come to School." <i>NBER Working Paper 11880</i> . Cambridge, MA: National Bureau of Economic Research (NBER).	Causal: Randomized control trial

#### **Policy Goal 4: Budgeting with adequate and transparent information**

The education budget represents the plan for implementing education policy. Objective information on resource needs should be incorporated to develop a budget that reflects education sector priorities, and the need to use reliable data continues throughout budget execution. Reported education expenditure of all levels of government along budget priorities allows school finance systems to monitor the success of budget execution and make adjustments as necessary.

SABER-School Finance uses two policy levers to assess progress in this policy goal: (A) Is there an informed budget process?; and (B) Is the budget comprehensive and transparent?

#### **Policy Lever 4A: Is there an informed budget process?**

Education budgets are created in a political environment to deliver education priorities, preferences, and goals, which creates the opportunity for the subjective distribution of resources (Gildenhuys 1997). A clear and rule-based funding method allows educational stakeholders to hold the education system accountable as it transfers resources between levels of government and finally to schools (Alonso & Sanchez 2011). Other budget decision-making processes, such as negotiations or an incremental increase of the previous year’s budget, may not result in allocations that accurately reflect schools’ needs. Factors that influence the budget should explicitly address drivers of education expenditure, such as teaching staff, enrollment, or changes in unit costs.

Education expenditure has long-term consequences as a cumulative investment in students over at least their primary and secondary schooling. Certain commitments may require recurring spending each year, whereas other spending such as school construction, may preclude spending in future years. Therefore, education expenditure must be considered on a multi-year basis to allow for sustainability and predictability of funding (Andrews & Campos 2003). Future education expenditure should be fully costed and available by nature of spending (current or capital, primary or secondary level) as well as clearly linked to policy plans.

*Table 8: Evidence for Policy Lever 4A, Is there an informed budget process?*

Indicator	Evidence	Methodology
1. To what extent does the budget use explicit criteria at the national or subnational level to decide education funding?	Alonso, J. D., and Sanchez, A. (eds). (2011). <i>Reforming Education Finance in Transition Countries: Six Case Studies in Per Capita Financing Systems</i> . Washington, DC: The World Bank.	Qualitative: Case studies
2. What factors are taken into account for budget preparation?	Gildenhuys, J.S.H. (1997). <i>Public Financial Management</i> . Pretoria: J. L. vanSchaik Publishers.	Qualitative: Summary of best practices
3. Is there a multi-year budget process?	PEFA Secretariat. (2005). <i>Public Financial Management: Performance Measurement Framework</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices
	Andrews, M. and Campos, J. E. (2003). “The Management of Public Expenditures and its Implications for Service Delivery.” Washington, DC: The World Bank.	Qualitative: Summary of best practices

**Policy Lever 4B: Is the budget comprehensive and transparent?**

Publicly available information on the amount of funding will strengthen the ability of parents and students to hold governments and schools accountable for education resources and increase the amount of transfers that arrive at the school (Reinikka & Svensson 2004; World Bank 2003). Public schools and sometimes private, government-dependent schools receive a substantial amount of their total funding from the government. Before these public resources reach the school and ultimately students as beneficiaries, they often must pass through at least one level of government. If the government does not report on the education budget, there is an opportunity for funds to disappear before they reach their intended use. Budget

implementation is monitored through the planned budget, its execution during the year, and its end of the year execution.

Annual budget documentation should present a broad context for the current year’s budget, including revenue data as indications of predictability and stability. In addition, outturn from the previous year’s budget will allow policymakers and other stakeholders to know how efficiently the planned education budget was executed in the past, and whether the budget is a true predictor of final expenditure. Lastly, the new policy initiatives should be explained as they related to the current budget.

A clear and thorough classification system for the education budget allows for tracking of spending in several ways: administrative unit, economic, functional, and program (PEFA Secretariat 2005). Government Financial Statistics (GFS) and Classification of Functions of Government (COFOG) outline the most commonly accepted international system for economic and functional classification of transactions. The budget should be available in a format that presents all of these breakdowns.

The Ministry of Finance often sets the overall allocation of resources for the education budget, but lower levels of government (subnational or local as relevant) may also have substantial responsibility for implementing education budgets. The funding relationship between the central government and the lower levels may be characterized by intergovernmental transfers for education, particularly from the central level to lower levels. The central government should have an interest in how resources are used for education across subnational or local divisions, and therefore ask for reporting on expenditures. Information on education expenditure at lower levels of government will improve the central government’s ability to effectively allocate funds across subnational or local divisions (Schaeffer & Yilmaz 2008). In return, the subnational and local divisions should have information on the amount of transfers they will receive in a timely manner to allow for systematic budget preparation (PEFA Secretariat 2005).

*Table 9: Evidence for Policy Lever 4B, Is the budget comprehensive and transparent?*

Indicator	Evidence	Methodology
1. Is the planned or executed budget classified in transparent ways?	PEFA Secretariat. (2005). <i>Public Financial Management: Performance Measurement Framework</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices
2. Is documentation of the planned or executed budget comprehensive?	PEFA Secretariat. (2005). <i>Public Financial Management: Performance Measurement Framework</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices
3. Does the government publicly report on education budgets?	Reinikka, R. and Svensson, J. (2004). “The Power of Information: Evidence from a Newspaper Campaign to Reduce Capture.” <i>World Bank Policy Research Working Paper 3239</i> . Washington, DC: The World Bank.	Semi-causal: Difference in difference, instrumental variables
	World Bank. (2003). <i>World Development Report 2004: Making Services Work for Poor People</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices
	PEFA Secretariat. (2005). <i>Public Financial Management: Performance Measurement</i>	Qualitative: Summary of best practices

Indicator	Evidence	Methodology
	<i>Framework</i> . Washington, DC: The World Bank.	
4. Do subnational (or local) governments receive timely information on the amount of intergovernmental transfers?	Schaeffer, M. and Yilmaz, S. (2008). "Strengthening Local Government Budgeting and Accountability." <i>World Bank Policy Research Working Paper 4767</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices
	PEFA Secretariat. (2005). <i>Public Financial Management: Performance Measurement Framework</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices
Indicator	Evidence	Methodology
5. Is education expenditure from subnational governments (or local) consolidated at the national level (or subnational)?	Schaeffer, M. and Yilmaz, S. (2008). "Strengthening Local Government Budgeting and Accountability." <i>World Bank Policy Research Working Paper 4767</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices
	PEFA Secretariat. (2005). <i>Public Financial Management: Performance Measurement Framework</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices

### Policy Goal 5: Providing more resources to students who need them

School finance systems should seek to improve education outcomes for students from disadvantaged backgrounds and reduce outcome gaps among groups of students. Access and success in education should not depend on a person's background (Oosterbeek & Patrinos 2009). Yet, in most settings, as poverty increases, enrollment decreases (Glick & Sahn 2009). Educational attainment differs due to income level differences across countries but also to an equal or even greater extent by socio-economic background within countries (Filmer 2008), making it imperative to document how governments address inequality in access to education resources. Equity can be difficult to measure, but the objective is to promote equal opportunities by fairly providing unequal resources to students with differing educational challenges.

SABER-School Finance uses two policy levers to assess the extent to which the public and private investments in education contribute to the goal of providing learning opportunities to all students: (A) Are public resources available to students from disadvantaged backgrounds?; and (B) Do payments for schooling represent a small share of income for low-income households?

#### Policy Lever 5A: Are public resources available to students from disadvantaged backgrounds?

Often, to compensate for disadvantages, school finance systems provide additional resources to schools that teach disadvantaged students so that schools can offer targeted services, such as additional teachers or specialized learning materials. In OECD countries, funding formulae based on student needs are commonly used to distribute these resources (Fazekas 2012). On the demand side, conditional cash transfers (CCTs) to households have also been shown to increase enrollment in several settings (Schultz 2004). Unlike additional funding for schools, this intervention targets household constraints on enrollment and learning. The structure of these programs may vary, but CCTs usually provide money or in-kind rewards to children or their

families conditional on enrollment or attendance, making children on the margin of attending school are more likely to enroll and participate in education due to the incentive.

Rigorous methods to identify disadvantaged students are crucial to ensuring that all of the intended student population is targeted. Poverty-reduction programs may use individual assessment such as means or proxy-means testing or categorical assignment by geographic or demographic characteristics to identify participants (Grosh et al. 2008). A review of these methods shows that, although there is variability within methods, means testing on an individual basis is the most effective. Other commonly used methods include proxy-means testing, or prediction of needs based on detailed information from a household survey, and geographic targeting when poverty is spatially concentrated (Coady et al. 2003).

Special needs students require a differentiated approach unique from other disadvantages. School systems differ in how they address special needs, through special schools or more inclusive education in mainstream schools. Special schools often develop first, such as schools for the deaf and blind. How these students receive educational services has implications for equal educational opportunity. The concept of “least restrictive environment” in special education dictates that students with special needs should be educated with non-disabled children to the extent that it is appropriate, given their needs. Evidence is inconclusive on the extent to which special schools or mainstream education are more effective (Farrell et al. 2007; Foster & Emerton 1991; Fuchs & Fuchs 1994). However, there is a general trend in OECD countries toward inclusive education due to educational, social, and economic benefits (World Health Organization 2011). The United Nations Convention on the Rights of Persons with Disabilities recognizes the right of all children with disabilities to be included in the general education systems and to receive individual support they require. Excluding these children from the systems will result in high social and economic costs because they will not be able to fully engage with society and the labor force as adults (World Health Organization 2011).

*Table 10: Evidence for Policy Lever 5A, Are public resources available to students from disadvantaged backgrounds?*

Indicator	Evidence	Methodology
1. Are there policies to provide more public resources to schools or households with socio-economically disadvantaged students?	Filmer, D. (2008). “Inequalities in Education: Effects of Gender, Poverty, Orphanhood, and Disability.” In M. Tembon and L. Fort (Eds.) <i>Girls’ Education in the 21<sup>st</sup> Century</i> . Washington, DC: The World Bank.	Correlational: Analysis of household survey data
1. Are there policies to provide more public resources to schools or households with socio-economically disadvantaged students? (continued)	Baker, B. D. and Green, P. C. (2008). “Conceptions of Equity and Adequacy in School Finance.” In H. F. Ladd and E. B. Fiske (Eds.) <i>Handbook of Research in Education Finance and Policy</i> . New York, NY: Routledge.	Qualitative: Summary of best practices
	Fazekas, M. (2012). “School Funding Formulas: Review of Main Characteristics and Impacts.” <i>OECD Education Working Papers</i> , No. 74. Paris, France: OECD Publishing.	Qualitative: Trends in high-performing systems

Indicator	Evidence	Methodology
	Schultz, T. (2004). "School Subsidies for the Poor: Evaluating the Mexican Progresa Poverty Program." <i>Journal of Development Economics</i> 74(1), 199– 250.	Causal: Randomized control trial
2. How are the needs of socio-economically disadvantaged students identified?	Grosh, M., del Ninno, C., Tesliuc, E., Ouerghi, A. (2008). <i>For Protection and Promotion: The Design and Implementation of Effective Safety Nets</i> . Washington DC, The World Bank.	Qualitative: Summary of best practices
	Coady, D., Grosh, M., and Hoddinott, J. (2003). "Targeting Outcomes, Redux." <i>Food Consumption and Nutrition Division Discussion Paper 144</i> . Washington, DC: International Food Policy Research Institute.	Qualitative: Summary of best practices
3. Are there policies to provide more resources to schools or households with other disadvantaged students (ethnicity, gender, native language, urban/rural)?	Patrinos, H. A. and Psacharopoulos, G. (1992). "Socioeconomic and Ethnic Determinants of Grade Repetition in Bolivia and Guatemala." <i>World Bank Policy Working Papers 1028</i> . Washington, DC: The World Bank.	Correlational: Regression analysis
	Filmer, D. (2008). "Inequalities in Education: Effects of Gender, Poverty, Orphanhood, and Disability." In M. Tembon and L. Fort (Eds.) <i>Girls' Education in the 21<sup>st</sup> Century</i> . Washington, DC: The World Bank.	Correlational: Analysis of household survey data
	Brown, P. H. and Park, A. (2002). "Education and poverty in rural China." <i>Economics of Education Review</i> 21(6), 523-541.	Correlational: Regression analysis
	Coady, D., Grosh, M., and Hoddinott, J. (2003). "Targeting Outcomes, Redux." <i>Food Consumption and Nutrition Division Discussion Paper 144</i> . Washington, DC: International Food Policy Research Institute.	Qualitative: Summary of best practices
4. How are the needs of other disadvantaged students (ethnicity, gender, native language, urban/rural) identified?	Grosh, M., del Ninno, C., Tesliuc, E., Ouerghi, A. (2008). <i>For Protection and Promotion: The Design and Implementation of Effective Safety Nets</i> . Washington DC, The World Bank.	Qualitative: Summary of best practices
5. Where do students with disabilities or special needs receive their education?	Farrell, P., Dyson, A., Polat, F., Hutcheson, G., and Gallannaugh, F. (2007). "SEN inclusion and pupil achievement in English schools." <i>Journal of Research in Special Educational Needs</i> (7)3, 172-178.	Correlational: Regression analysis
	Foster, S. and Emerton, G. (1991). "Mainstreaming the Deaf Student: A Blessing or a Curse?" <i>Journal of Disability Policy Studies</i> (2)61, 62-76.	Qualitative: Summary of best practices

Indicator	Evidence	Methodology
	Fuchs, D. and Fuchs, L. S. (1994). "Sometimes separate is better." <i>Educational Leadership</i> (52)4, 22-27.	Qualitative: Summary of best practices
Indicator	Evidence	Methodology
5a. Which special needs are met?	World Health Organization. (2011). <i>World Report on Disability</i> . Malta: World Health Organization.	Qualitative: Summary of best practices

**Policy Lever 5B: Do payments for schooling represent a small share of income for low income households?**

Private expenditure supplements public funding for education in many developing countries, where governments may be unable to generate sufficient resources to provide quality basic education (Hillman & Jenkner 2002). Schools may complement funding received from higher levels of government by raising revenue to meet locally informed needs such as extra-curricular activities or classroom materials. However, in some cases, required household payments for schooling represents a substantial portion of earnings in low income households, which often discourages enrollment and makes it impossible to break the intergenerational cycle of poverty that education is intended to reduce, especially for girls (Kattan 2006).

Even though primary school fees have been officially abolished in many settings, additional and sizeable required payments are common in order to maintain quality in the context of limited public resources or rising student populations (Mingat 2004). Many parents still report paying regardless of policy or ability to pay (Transparency International 2009). Sanctioned school fees are more prominent at the secondary level, and may increase future income inequality if the wealthy are more likely to complete additional schooling and become eligible for higher education or greater earning potential (Kattan 2006; Psacharopoulos & Woodhall 1985). Potential sanctioned revenue sources include tuition or textbooks fees as well as PTA or community contributions. Due to concerns about equity, some of these revenue sources may be prohibited, as the ability to contribute outside funds can vary greatly within and across communities.

School fees, or direct costs of education, may seem small, but they should be considered as additional burden to the indirect opportunity costs creating by attending school. If school fees are a necessary revenue source, the poorest should not be required to contribute equally. Mandatory waivers should exist for those primary school students who have the least ability to pay fees.

*Table 11: Evidence for Policy Lever 5B, Do payments for schooling represent a small share of income for low income households?*

Indicator	Evidence	Methodology
1. What types of school fees are charged at the primary level?	Kattan, R. B. (2006). "Implementation of Free Basic Education Policy." <i>Education Working Paper Series Number-7</i> . Washington, DC: The World Bank.	Qualitative: Trends in school finance systems
Indicator	Evidence	Methodology

Indicator	Evidence	Methodology
1a. Are there mandatory waivers for students that are from disadvantaged backgrounds at the primary level?	Transparency International. (2009). <i>Africa Education Watch</i> . Berlin: Transparency International.	Qualitative: Trends in school finance systems
2. What types of school fees are charged at the secondary level?	Psacharopoulos, G. and Woodhall, M. (1985). <i>Education for Development: An Analysis of Investment Choices</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices
2a. Are there mandatory waivers for students that are from disadvantaged backgrounds at the secondary level?	Transparency International. (2009). <i>Africa Education Watch</i> . Berlin: Transparency International.	Qualitative: Trends in school finance systems

### Policy Goal 6: Managing resources efficiently

Experience in developing and developed countries has shown that providing resources is not enough to ensure learning outcomes. Tracking inputs, outcomes, and service delivery is a strong start, but insufficient. Reviews of final expenditure are necessary to hold actors in the school finance system accountable to using resources for their intended purposes. These mechanisms include how teachers and education staff are paid and monitored, among others (Fiszbein et al. 2011).

SABER-School Finance uses two policy levers to assess the efficiency of the expenditure process: (A) Are there systems in place to verify the use of educational resources?; and (B) Are education expenditures audited?

#### Policy Lever 6A: Are there systems in place to verify the use of educational resources?

Financing education begins with the distribution of government funds according to resource needs, or budgeting. After funds have been allocated, they must be disbursed, eventually reaching schools and students. The governance policies that impact the transfer of education resources have a substantial influence on the quality of service delivery at the school level (Fiszbein et al. 2011). This is especially true when actual education expenditure does not resemble the planned budget, which weakens the implementation of education policy.

Teachers' salaries account for the majority of education expenditures in many systems. Therefore, school finance systems should maintain a personnel database, or list of all education staff who should be paid every pay period. The personnel database should be updated frequently to account for transfers, dismissals, and new hires, and verified against the payroll database. Teachers' salaries are unlikely to be misappropriated for other purposes because teachers are usually aware of the amount of expected payment, but there is a significant risk of delay in payment or payment of ghost workers who do not actually teach (Ablo & Reinikka 1998). The payroll database is useful to record and make payments to teachers and other education staff.

Aside from current expenditure, a large amount of capital education expenditure funds construction of school buildings and takes place through public procurement systems. Contracts for school construction should be awarded a manner that ensures the best value for money and reduces corruption. Open competition has demonstrated to be the most efficient method for awarding these contracts. Awards for contracts should be publicly announced to maximize transparency, and procurement policies should also stipulate a process for addressing complaints (PEFA Secretariat 2005).

*Table 12: Evidence for Policy Lever 6A, Are there systems in place to verify the use of educational resources?*

Indicator	Evidence	Methodology
1. How frequently is the personnel database updated during the calendar year?	Fiszbein, A., Ringold, D., and Rogers, F. H. (2011). "Indicators, Assessments, and Benchmarking of the Quality and Governance of Public Service Delivery in the Human Development Sectors." <i>World Bank Policy Research Working Paper 5690</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices
2. How frequently is employment status of education staff verified during the calendar year?	Fiszbein, A., Ringold, D., and Rogers, F. H. (2011). "Indicators, Assessments, and Benchmarking of the Quality and Governance of Public Service Delivery in the Human Development Sectors." <i>World Bank Policy Research Working Paper 5690</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices
	Ablo, E. and Reinikka, R. (1998). "Do Budgets Really Matter? Evidence from Public Spending on Education and Health in Uganda." <i>World Bank Policy Research Working Paper 1926</i> . Washington, DC: The World Bank.	Correlational: Analysis of public expenditure data
3. Does the legal and regulatory framework for school construction contracts promote transparency and competitiveness?	PEFA Secretariat. (2005). <i>Public Financial Management: Performance Measurement Framework</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices

### **Policy Lever 6B: Are education expenditures audited?**

Accountability means that school finance systems provide necessary resources, collect information about education services made possible with these resources, and enforce quality standards for education (adapted from World Bank 2003). This requires reporting and auditing of financial resources. Accountability in school finance is particularly difficult because it involves both funding and service delivery at a decentralized unit, the school. In addition, many actors are involved: funding flows across levels of government, through ministries of education and finance, and finally to school administrators, who are ultimately responsible for effectively utilizing these resources.

Internal audits can provide regular feedback to education authorities on management of funds. These reports should address reliability and integrity of financial and operational information; effectiveness and efficiency of operations; safeguarding of assets; and compliance with laws, regulations, and contracts (PEFA Secretariat 2005). Consequences, such as improved supervision, dismissal, or salary cuts, should exist for failed internal audits, otherwise there is no purpose to executing them. Internal audits may be completed by education authorities themselves or by a third party government entity, but results should be distributed to other agencies that monitor quality in public financial management, such as the Supreme Audit Institution or the Ministry of Finance. External audits are the next step to verify whether resources have been used for their intended purposes. A high quality external audit should cover revenue and expenditure, take place regularly, and include formal follow up (PEFA Secretariat 2005).

*Table 13: Evidence for Policy Lever 6B, Are education expenditures audited?*

Indicator	Evidence	Methodology
1. Are internal audits carried out and reported?	PEFA Secretariat. (2005). <i>Public Financial Management: Performance Measurement Framework</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices
1a. Are there consequences for failed internal audits?	PEFA Secretariat. (2005). <i>Public Financial Management: Performance Measurement Framework</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices
2. Are external audits carried out?	PEFA Secretariat. (2005). <i>Public Financial Management: Performance Measurement Framework</i> . Washington, DC: The World Bank.	Qualitative: Summary of best practices

Table 14 summarizes the policy levers, and indicators to assess progress in the six policy goals of the SABER-School Finance framework.

*Table 14: Summary of SABER-School Finance Policy Goals, Levers, and Indicators*

SABER - School Finance Framework: Policy Goals		
Goal	Lever	Indicator
<b>1. Ensuring basic conditions for learning</b>	<b>1A: Are there policies to ensure basic inputs?</b>	1. Is there is a clearly stated policy to require that basic infrastructure is provided in primary schools?
		2. Is there is a clearly stated policy to require that teaching and learning materials are provided in primary schools?
		3. What are the minimum educational requirements to become a primary school teacher?
		4. Is there is a clearly stated policy to require that basic infrastructure is provided in secondary schools?
		5. Is there is a clearly stated policy to require that teaching and learning materials are provided in secondary schools?
		6. What are the minimum educational requirements to become a secondary school teacher?
	<b>1B: Are there</b>	1. Are there system-wide performance goals at the primary level?

	<b>established learning goals?</b>	2. Are there system-wide performance goals at the secondary level
<b>2. Monitoring learning conditions and outcomes</b>	<b>2A: Are there systems in place to monitor learning conditions?</b>	1. What is the scope of available data for basic infrastructure, teaching and learning materials, and qualified teachers?
		2. How frequently is a school census produced?
		3. Is administrative school data centrally reported in a timely manner?
		3a. Is student attendance reported in a timely manner?
	<b>2B: Are there systems in place to assess learning outcomes?</b>	1. How often are large-scale student achievement assessments administered?
		2. Who participates in the large-scale student achievement assessments program?
		3. Does the large-scale student achievement assessment program target grades in each level of schooling?
		4. Do results from the large-scale student achievement assessment allow for disaggregation by student characteristics?
		5. Are assessment data accessible and useable by those in the planning unit?
	<b>SABER - School Finance Framework: Policy Goals</b>	
<b>Goal</b>	<b>Lever</b>	<b>Indicator</b>
<b>3. Overseeing service delivery</b>	<b>3A: What mechanisms are in place to verify the delivery of resources at schools?</b>	1. Are there mechanisms to track how many effective school days are in the primary school year?
		2. Are there mechanisms to track how many effective school days are in the secondary school year?
		3. Are there mechanisms to track the proportion of primary schools that had prescribed textbooks within the first month of school?
		4. Are there mechanisms to track the proportion of secondary schools that had prescribed textbooks within the first month of school?
		5. How is school construction expenditure monitored?
	<b>3B: What mechanisms are in place to verify the availability of human resources at schools?</b>	1. How is teacher attendance monitored?
		2. Is there a policy to ensure that substitute teachers are provided when teachers are absent?
		3. Are there penalties for teacher absenteeism?
<b>4. Budgeting with adequate and transparent information</b>	<b>4A: Is there an informed budget process?</b>	1. To what extent does the budget use explicit criteria at the national or subnational level to decide education funding?
		2. What factors are taken into account for budget preparation?
		3. Is there a multi-year budget process?
	<b>4B: Is the budget comprehensive</b>	1. Is the planned or executed budget classified in transparent ways?

	<b>and transparent?</b>	2. Is documentation of the planned or executed budget comprehensive?
		3. Does the government publicly report on education budgets?
		4. Do subnational (or local) governments receive timely information on the amount of intergovernmental transfers?
		5. Is education expenditure from subnational governments (or local) consolidated at the national level (or subnational)?
<b>SABER - School Finance Framework: Policy Goals</b>		
<b>Goal</b>	<b>Lever</b>	<b>Indicator</b>
<b>5. Providing more resources to students who need them</b>	<b>5A: Are more public resources available to students from disadvantaged backgrounds?</b>	1. Are there policies to provide more public resources to schools or households with socio-economically disadvantaged students?
		2. How are the needs of socio-economically disadvantaged students identified?
		3. Are there policies to provide more resources to schools or households with other disadvantaged students (ethnicity, gender, native language, urban/rural)?
		4. How are the needs of other disadvantaged students (ethnicity, gender, native language, urban/rural) identified?
		5. Where do students with disabilities or special needs receive their education?
		5a. Which special needs are met?
	<b>5B: Do payments for schooling represent a small share of income for low income families?</b>	1. What types of school fees are charged at the primary level?
		1a. Are there mandatory waivers for students that are from disadvantaged backgrounds at the primary level?
		2. What types of school fees are charged at the secondary level?
		2a. Are there mandatory waivers for students that are from disadvantaged backgrounds at the secondary level?
<b>6. Managing resources efficiently</b>	<b>6A: Are there systems in place to verify the use of educational resources?</b>	1. How frequently is the personnel database updated during the calendar year?
		2. How frequently is employment status of education staff verified during the calendar year?
		3. Does the legal and regulatory framework for school construction contracts promote transparency and competitiveness?
	<b>6B: Are education expenditures audited?</b>	1. Are internal audits carried out and reported?
		1a. Are there consequences for failed internal audits?
		2. Are external audits carried out?

### 3. SABER-School Finance Framework

**SABER-School Finance is a tool that guides the collection of standard data to characterize and assess school finance systems around the world.** To increase the knowledge base, SABER - School Finance collects data on school finance systems along five core areas, including school conditions and resources, allocation mechanisms, revenue sources, education spending, and fiscal control and capacity. This information is used to classify school finance systems according to how well they address six essential policy goals of school finance: (i) Ensuring basic conditions for learning; (ii) Monitoring learning conditions and outcomes; (iii) Overseeing service delivery; (iv) Budgeting with adequate and transparent information; (v) Providing more resources to students who need them; and (vi) Managing resources efficiently. The annex lists information that will be collected by SABER-School Finance in each core area, and highlights which data will be used to assess progress in policy goals. All information gathered by SABER-School Finance will be made available in a publicly accessible database.

**The initiative focuses on the design of school finance policies as opposed to their implementation on the ground.** Although sound policies do not guarantee effective implementation, in many cases, having a policy in place is a first step toward good practice. Policies can also demonstrate the level of government commitment, and allow for provision of funding and enforcement of expectations. The SABER-School Finance tool aims to measure policy intent, and by doing so, identify issues for which deeper analysis is necessary. Complementary activities that look at implementation, such as Public Expenditure Tracking Surveys or Quantitative Service Delivery Surveys, will involve a different methodological approach and financial and human resources that are beyond the reach of SABER.

**The tool primarily analyzes how publicly-funded schools are financed.** Public revenue remains the dominant source for education resources for most countries, although the share of education revenue financed by private sources is increasing in some systems such as India. However, SABER-School Finance collects information as feasible to describe the composition and financing arrangements of public, private, and private, government-dependent schools, defined by the nature of the financing and provider.<sup>8</sup> Data collected on nature of financing as available will be topics of further study. Another domain of SABER, Regulatory Frameworks, will examine more in-depth the issue of private provision in education.

**SABER-School Finance examines the financing of primary and secondary education.** The framework does not address the financing arrangements for early childhood development (ECD) or tertiary education, which may differ greatly from financing at primary and secondary levels. ECD, for example, often involves coordination of many sectors and a large share of provision by non-government providers including donors. The financing of tertiary education may engage a large number of private providers or require substantial private contributions from students. Additional SABER domains, SABER-Early Childhood Development and SABER-Tertiary Education, explore finance systems at these levels.

**SABER-School Finance documents the degree of decentralization of the school finance system, but does not assess systems based on this information.** School finance systems differ in the relative autonomy of subnational, local, and school actors. In recent decades, several countries have experimented with efforts to devolve authority over budget allocation decisions to subnational levels of government. The underlying hypothesis is that bringing decision-making closer to those who directly

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<sup>8</sup> Public schools are both publicly financed and publicly managed; private schools are both privately financed and privately managed; private, government-dependent schools are privately managed schools that receive at least some public funding.

provide services and/or the beneficiaries will contribute to more efficient use of resources. Several countries have also experimented with school-based management (SBM), a form of decentralization, which devolves budget allocation authority for at least some part of the total school budget to the school. Effective decentralization of the provision of public education assumes that local governments are as technically able as the central government to administer education services and are accountable to students and their parents. In turn, such accountability requires that communities have access to relevant information to monitor service delivery and the power to affect change (World Bank 2003). However, evidence suggests that where local capacity and political accountability are weak, school management committees can be “captured” by the head teacher or local elites reducing its ability to monitor service delivery independently and to ensure that public resources are invested to meet students’ educational needs and interests (Barrera-Osorio et al. 2009; Transparency International 2009). Similarly, successful implementation and outcomes associated with SBM most often have been observed in more advantaged schools with already established tradition of informal if not formal, participatory governance (Plank & Smith 2008). In sum, effective systems may require a combination of central government control for redistribution and local authority to allocate resources according to students’ needs and monitor spending.

**SABER-School Finance is one of several areas of study in a larger World Bank initiative, Systems Approach for Better Education Results (SABER).** SABER is an effort to collect, analyze, and disseminate data on education systems to achieve learning for all. The Education Unit of the World Bank is working with partners around the world to develop diagnostic tools that better understand and analyze education policies according to evidence-based global standards and best practice. By leveraging global knowledge, SABER fills a gap in the availability of policy data, information and knowledge on what matters most to improve the quality of education. SABER aims to provide a quick but thorough appraisal of policy intent, not implementation, allowing education systems to prioritize areas in need of further and more involved study. In addition to school finance, these tools are or will be soon available for several policy domains: early childhood development, education management and information systems, information and communication technologies, learning standards, school autonomy and accountability, school health and feeding, student assessment systems, teacher policies, tertiary education, and workforce development. SABER-School Finance helps systems to improve their deployment of the financial resources necessary for learning.

## Conclusion

**Financing primary and secondary schools is a complex process with multiple objectives: school finance systems strive to provide enough resources so that all children have the opportunity to learn, but at the same time, resources must be used as efficiently as possible.** Policymakers do not always know the best way to improve their school finance systems, even though financing is an essential part of any education system; without resources, schools will not function. SABER-School Finance presents a clear framework for benchmarking school finance systems along six policy goals that all systems should meet. These goals promote effective strategies for channeling resources through the system, which starts with policies to ensure learning resources and outcomes, especially for disadvantaged students. This requires an informed and objective budgeting process, as well as monitoring resources on their way to the service delivery unit, the school. SABER-School Finance will collect data to assess progress in these goals, which will enable the development of a database with internationally comparable information on school finance systems across countries. With more information about how school finance systems operate, SABER-School Finance will broaden the global knowledge base about effective school finance.

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## Appendix: Data collected by SABER-School Finance

\*Denotes indicator of implementation

Core area	Conceptual Question	Characteristic	Policy Goal
1. School conditions and resources	1. What are the basic inputs for all primary and secondary school students?	a) What is the share of schools that meet the standards for basic infrastructure?	.
		b) What proportion of students has access to potable water?	*1
		c) What proportion of students has access to functional hygienic facilities?	*1
		d) What is the average student teacher ratio?	.
		e) What is the percent of teachers who are qualified?	*1
		f) What proportion of students has access to a library?	*1
		g) What proportion of students has access to computers?	*1
		h) What is the average textbook-student ratio?	*1
		i) What is the share of schools that have a roof?	.
		j) What is the share of schools that have a cement floor?	.
		l) What is the share of schools that have walls?	.
		m) What is the effective length of the school year?	*3
		n) What is the average student-teacher ratio across the subnational divisions with the highest student-teacher ratios?	.
		o) What is the share of schools with electricity?	*1

Core area	Conceptual Question	Characteristic	Policy Goal
<b>1. School conditions and resources (continued)</b>	<b>2. Are there policies in place to ensure that basic educational inputs are provided to primary and secondary school students?</b>	a) Is there a policy to provide basic infrastructure?	.
		b) Is there a policy to provide potable water?	1
		c) Is there a policy to provide functional hygienic facilities?	1
		d) Is there a policy to provide teachers at a certain student teacher ratio?	.
		e) What are the requirements to become a qualified teacher?	1
		f) Is there a policy to provide libraries?	1
		g) Is there a policy to provide computers?	1
		h) Is there a policy to provide textbooks?	1
		i) Is there a policy to provide a roof?	.
		j) Is there a policy to provide a cement floor?	.
		l) Is there a policy to provide walls?	.
		m) What is the official length of the school year?	.
		n) Is there a policy to provide teachers at a certain student teacher ratio across the subnational divisions?	.
		o) Is there a policy to provide electricity?	1

Core area	Conceptual Question	Characteristic	Policy Goal
<b>1. School conditions and resources (continued)</b>	<b>3. Are there systems to monitor that basic educational inputs are provided to primary and secondary school students?</b>	a) Is there a system to monitor basic infrastructure?	.
		b) Is there a system to monitor potable water?	2
		c) Is there a system to monitor functional hygienic facilities?	2
		d) Is there a system to monitor teachers at a certain student teacher ratio?	.
		e) Is there a system to monitor qualified teachers?	2
		f) Is there a system to monitor libraries?	2
		g) Is there a system to monitor computers?	2
		h) Is there a system to monitor textbooks?	2
		i) Is there a system to monitor a roof?	.
		j) Is there a system to monitor a cement floor?	.
		l) Is there a system to monitor walls?	.
		m) Is there a central system to monitor how many effective school days occur in primary and secondary schools?	3
		n) Is there a system to monitor teachers at a certain student teacher ratio across the subnational divisions?	.
		o) Is there a system to monitor electricity?	2
		p) How often is a school census carried out?	2
	<b>4. What are the stated education goals?</b>	a) What are the objectives of education finance policies?	.
		b) What are system-wide performance goals at the primary and secondary levels?	1

Core area	Conceptual Question	Characteristic	Policy Goal
<b>1. School conditions and resources (continued)</b>	<b>5. Are there systems to monitor performance goals?</b>	a) Which performance goals are monitored at the primary and secondary levels?	.
		b) Are large-scale student achievement assessments administered?	2
		c) How often are large-scale student achievement assessments administered?	2
		d) Which grades are targeted by the large-scale student achievement assessments?	2
		e) Who participates in large-scale student achievement assessments?	2
		f) Do results from large-scale student achievement assessments allow for disaggregation by school or student characteristics?	2
		g) Are data from large-scale student achievement assessments available to those in the education planning unit?	2
		h) In the most recent large-scale student achievement assessments, what share of students has proficient scores in mathematics and reading?	2
	<b>6. What is the composition of schools in the education system?</b>	a) How many public, private, government-dependent, and privately-managed schools are there?	.
		b) Do public schools operate in multiple shifts?	.
	<b>7. How many students are enrolled?</b>	a) What is the total number of students enrolled in public and private, government-dependent schools?	.
		b) If students are classified as socio-economically disadvantaged to receive benefits, what is the total number of students classified as socio-economically disadvantaged?	.
		c) How many students are enrolled by native language?	.
		d) How many students are enrolled by urban and rural location?	.
		e) How many students are enrolled by each subnational division?	.

Core area	Conceptual Question	Characteristic	Policy Goal
<b>2. Allocation Mechanisms</b>	<b>1. Each year, at the national or subnational level, how is the decision made about how much is going to be spent on education?</b>	a) Is the total public education budget largely determined centrally?	.
		b) What is the process at each level of government for deciding how much to spend on education (constitutional mandate, legislative process, executive decision, or transfer from another level of government)?	.
		c) What authority is responsible for planning and monitoring the education budget at the national, subnational, and local levels?	.
		d) Are schools' current budgets centrally allocated by the Ministry of Education?	.
	<b>2. What determines the distribution of public sector funding for education to lower levels of government and to schools (public &amp; government dependent private)?</b>	a) How are teacher salaries determined?	.
		b) Who controls the teacher payroll?	.
		c) How much funding is allocated by formula as a share of total public funding for education?	.
		d) For the capital budget, what is the process at each level of government for deciding how much to spend on education (formula, performance-based, negotiations, incremental increase, line item, program-based, project-based)?	4
		e) For the current budget, what is the process at each level of government for deciding how much to spend on education (formula, performance-based, negotiations, incremental increase, line item, program-based, project-based)?	4
		f) How are non-formula based transfers determined (formula, performance-based, negotiations, incremental increase, line item, program-based, project-based)?	4
		g) If there are funding formulas, what criteria are used to decide where money flows?	4
		h) How is the allocation of these resources calculated?	.
		i) What levels of government uses this formula?	.

Core area	Conceptual Question	Characteristic	Policy Goal	
<b>2. Allocation Mechanisms (continued)</b>	<b>3. How is funding allocated for different student groups?</b>	a) Are there school financing policies that directly or indirectly target disadvantaged groups in primary or secondary schools?	5	
		b) Are there any specific government programs to provide incentives to households for children to attend or complete primary or secondary school?	5	
		c) If a program exists, what is the education requirement?	.	
		d) Which types of disadvantaged groups do funding policies favor?	5	
		e) Are additional resources provided to all eligible students or schools, or only some that meet the criteria for eligibility?	5	
		f) What methods are used to identify the needs of students from disadvantaged backgrounds?	5	
	<b>4. How is education funding monitored?</b>	a) If there are monetary transfers from a higher level of government, are transfers earmarked for education?	.	
		b) How are public monetary resources transferred?	.	
		c) What system is used to track expenditure at all levels (electronic, paper)?	.	
		d) Which expenditures are required to be reported on?	.	
	<b>5. How much of the education budget is allocated to each level?</b>	a) Over the past 5 years, how much of the education budget was allocated to each level of government?	.	
	<b>3. Education Spending</b>	<b>1. How big is the education sector?</b>	a) What is total public expenditure on education as a share of GDP (primary and secondary levels)?	.
			b) What is total public expenditure on education as a share of government spending?	.
c) What were total public expenditures on education for the last 5 years (primary and secondary levels)?			.	

Core area	Conceptual Question	Characteristic	Policy Goal
<b>3. Education Spending (continued)</b>	<b>2. How much of the total public education budget is allocated to different levels of education?</b>	a) What is public expenditure on pre-primary education as a share of total public education expenditure?	.
		b) What is public expenditure on primary education as a share of total public education expenditure?	.
		c) What is public expenditure on secondary education as a share of total public education expenditure?	.
		d) What is public expenditure on tertiary education as a share of total public education expenditure?	.
		e) What is total public expenditure on education as a share of government spending (primary and secondary levels)?	.
	<b>3. How much is spent per student at each level of education?</b>	a) What is public expenditure per primary student as a share of per capita GDP?	*1
		b) What is public expenditure per secondary student as a share of GDP per capita?	*1
		c) What is public expenditure per tertiary student as a share of GDP per capita?	.
		d) What is public expenditure per primary student in PPP?	.
		e) What is public expenditure per secondary student in PPP?	.
		f) What is spending per pupil over time in constant terms (most recent 5 years)?	.
		g) What is private expenditure per pupil for educational programs outside the formal sector, e.g. tutoring, exam prep programs?	.

Core area	Conceptual Question	Characteristic	Policy Goal
<b>3. Education Spending (continued)</b>	<b>4. How much is spent on different inputs?</b>	a) What is public education expenditure by nature for all purposes (schools, intergovernmental transfers, transfers to private sector, other expenditure, capital, current) at the national, subnational, and local levels?	.
		b) What is public expenditure on teacher salaries as a share of total public education expenditure?	.
		c) What proportion of education spending goes to privately-managed schools?	.
		d) What is capital expenditure as a share of total public education expenditure for all levels?	.
		e) What is current expenditure as a share of total public education expenditure for all levels?	.
		f) What is current expenditure for education at primary, secondary, and tertiary levels, as a share of current education expenditure?	.
		g) What is public education expenditure on other, non personnel as a share of current education spending?	.
		h) How are teachers compensated, including salary and non-salary benefits?	.
	<b>5. How does spending per student vary within country and across groups of students?</b>	a) Are there school financing policies that target disadvantaged students (socio-economic background, ethnicity, gender, native language, urban/rural, special needs)? If so, which student groups are targeted?	5
		b) What share of total public education spending is differentiated for each student group?	*5
		c) Which ethnicities and/or native languages are targeted?	.
		d) Where do students with special needs receive their education (mainstream or special schools)?	5
		e) If students with special needs receive education services, which needs are accommodated (visual, hearing, mobility, cognitive, and socio-emotional)?	5
		f) What is public expenditure per student by municipality/district?	.

Core area	Conceptual Question	Characteristic	Policy Goal
<b>4. Revenue Sources</b>	<b>1. Where do revenues for education expenditure come from?</b>	a) As a share of GDP, how much of total education expenditure comes from public revenue?	.
		b) As a share of GDP, how much of total education expenditure comes from private revenue?	.
		c) As a share of GDP, how much of total education expenditure comes from international revenue?	.
		d) Over the last 5 years, how much of the education budgets at the national, subnational, and local levels have come from each source (international actors, intergovernmental transfers, own-source revenue, and private sources)?	.
	<b>2. Of the public share, how are these revenues generated?</b>	a) At the lowest subnational level that provides education, what percentage comes in the form of transfers from a higher level? What percentage comes from own source revenue?	.
		b) Is the subnational or local level authorized/encouraged/required/prohibited to raise funds for education?	.
		c) Are there restrictions on the use of own-source revenue?	.
		d) For each level of government that generates funds, what are the sources of own source revenue?	.
		e) If general revenue or taxes is a revenue source, what type of taxes is used to generate revenue for education?	.
		f) If there are dedicated sources of revenue at the national level, what is the source?	.
		g) If there is a stabilization fund at the national level, what is the source?	.
	<b>3. How much discretion do schools have over the use of revenues?</b>	a) Can school directors request additional funds from government and private sources?	.
		b) For what purposes can schools use private or international revenues?	.
c) Is public funding received by private, government-dependent schools earmarked for certain purposes?		.	
d) What share of private, government-dependent schools' current budgets is received from the government?		.	

Core area	Conceptual Question	Characteristic	Policy Goal
<b>4. Revenue Sources (continued)</b>	<b>4. Does the public sector raise funds for education through school fees?</b>	a) For which grades at the primary level can public schools charge fees? Which are provided free of charge?	5
		b) For which grades at the secondary level can public schools charge fees? Which are provided free of charge?	5
		c) For what purposes are mandatory fees allowed at the primary and secondary levels?	5
		d) If school fees are allowed, which individuals have the authority or right to set school fees at the primary and secondary levels?	.
		e) If school fees are allowed, which individuals have the authority to collect fees at the primary and secondary levels?	.
		f) Are there mandatory waivers of school fees for disadvantaged students? If so, who finances?	5
		g) What additional charges related to education are households required to pay at public schools?	5
		h) What is average household expenditure on education as a share of total household spending for the lowest and highest income quintiles?	*5
	<b>5. Is international aid integrated effectively into budgets?</b>	a) Do donors use country systems (financial management, procurement, etc.) when they disburse aid?	.
		b) Is the government given discretion over how it uses aid financing?	.

Core area	Conceptual Question	Characteristic	Policy Goal
<b>5. Fiscal Control and Capacity</b>	<b>1. What are systems in place to track the transfer of resources to different levels of government and to schools?</b>	a) In the last school year, what proportion of schools had the prescribed textbooks and learning materials within the first month of school?	*3
		b) Which actors are required to report on the use of public resources for education?	.
		c) To whom are the actors required to report on the use of public resources for education?	.
		d) What are the actors required to report?	2
		e) How frequently is reporting required for each item?	2
		f) How does the national and/or subnational government publicly report the amount of intergovernmental transfers for education?	4
		g) How is teacher attendance monitored in public schools?	3
		h) What are allowable consequences of teacher absenteeism?	3
		i) Is there a policy to ensure that substitute teachers are provided when teachers are absent?	3
		j) How are teacher salaries paid (electronically, by check, or by cash)?	.
		k) Does the government keep records of how often teachers are paid?	.
		l) How many official school days are there in a school year?	.
		m) How many effective school days are there on average?	*3
		n) What is the nature of the personnel database for education staff?	6
		o) What is the nature of the payroll database for education staff?	6
p) Is there a central system to monitor how many primary and secondary schools have textbooks?	3		
q) Is central reporting required for student attendance?	2		

Core area	Conceptual Question	Characteristic	Policy Goal
<b>5. Fiscal Control and Capacity (continued)</b>	<b>2. How is the use of education resources at different levels monitored and audited?</b>	a) Are audits for education financing required for schools or levels of government?	.
		b) What do audits cover?	6
		c) Are there required consequences for failed audits?	6
		d) Do audits take place at least annually for the national and subnational levels?	.
		e) How frequently are audits conducted at the school level?	.
		f) In the last year, how many audits were carried out at each level?	.
		g) Are education audit results required to be made available? To whom?	.
		h) Are the audits required to follow international standards?	6
		i) Do subnational government receive projections of intergovernmental transfers for planning purposes?	4
		j) Do subnational governments report education expenditure of intergovernmental transfers to the central level?	4
		k) Do subnational governments report education expenditure of resources they generate themselves to the central level?	4
		l) How often are internal audits carried out?	6
		m) Which actors receive reports from internal audits?	6
		n) Are there consequences for failed internal audits?	6

Core area	Conceptual Question	Characteristic	Policy Goal
<b>5. Fiscal Control and Capacity (continued)</b>	<b>3. What is the capacity for planning and monitoring the education budget?</b>	a) What are the qualification requirements for personnel in auditing and monitoring positions?	.
		b) What is the share of personnel in education auditing or monitoring positions that meet these qualifications?	.
		c) What percentage of budgeted resources is spent?	*4
		d) How is the planned or executed budget classified?	4
		e) What budgetary information does the planned or executed budget include?	4
		f) What factors are taken into account during education budget preparation?	4
		g) By policy, are forecasts of education expenditure prepared?	4
	<b>4. How is school construction monitored?</b>	a) Are there standards for school construction quality?	6
		b) How are school construction standards monitored?	6
		c) How often are school construction standards monitored?	6
		d) How are school construction contracts awarded?	6
		e) Who has the formal authority to monitor construction expenditure?	3
		f) Are opportunities to bid publicly announced?	6
	g) Is there an established process to complain about the procurement process?	6	

The Systems Approach for Better Education Results (SABER) initiative collects data on the policies and institutions of education systems around the world and benchmarks them against practices associated with student learning. SABER aims to give all parties with a stake in educational results—from students, administrators, teachers, and parents to policymakers, business people, and political leaders—an accessible, detailed, objective snapshot of how well the policies of their country's education system are oriented toward delivering learning for all children and youth.

This report focuses specifically on policies in the area of School Finance.

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