Policy Goals

1. **Ensuring basic conditions for learning**
   Policies exist to provide most of the basic educational inputs; performance goals exist for primary school students, but not for secondary school students

2. **Monitoring learning conditions and outcomes**
   Information on learning outcomes is available to inform the allocation of resources, but systems to monitor learning conditions and outcomes need strengthening

3. **Overseeing service delivery**
   There are systems to monitor availability of teachers and other resources at the school level

4. **Budgeting with adequate and transparent information**
   Documentation of the Jamaican education budget lacks crucial information and forecast budgets are not prepared

5. **Providing more resources to students who need them**
   Personal costs for schooling are relatively low for low-income families, and there are programs in place to support socioeconomically disadvantaged students

6. **Managing resources efficiently**
   Audits and procurement systems are strong, but personnel databases need improvement
Overview of SABER-School Finance

All education systems rely on financing to function, but the characteristics and actions of a successful school finance system are not always clear. Research has seldom shown a strong relationship between spending and learning outcomes in education, which leads some researchers and policymakers to question whether the amount of spending in education matters at all (Hanushek 1986). Among countries with similar levels of income, those that spend more on education do not necessarily score higher on international assessments such as the Program for International Student Assessment (PISA). Even within an education system, student achievement can vary substantially among localities that spend comparable amounts (Wagstaff & Wang 2011). The observation that learning outcomes are seemingly unrelated to spending levels supports the argument that how money is spent, not simply how much, matters in education finance.

Although the availability of financial resources does not guarantee quality education, it is impossible to achieve this goal without adequate resources (Reschovsky & Imazeki 2001), which often come from public sources. Education spending comprises a large share of government budgets—particularly in low-income countries, where 18 percent of public expenditure, on average, is devoted to education (EdStats 2011). Governments are responsible for using these public funds in a way that promotes the highest possible learning levels, especially given the pressure placed on budgets by the global financial crisis and continuing economic volatility. Understanding how to use resources for education wisely should thus be a top priority for education policymakers.

Systems Approach for Better Education Results (SABER)-School Finance informs this conversation with a focus on the policies that drive performance in a school finance system. SABER-School Finance collects, analyzes, synthesizes, and disseminates comprehensive information on school finance policies in primary and secondary education across a range of different education systems. Our goal is to enable policymakers to learn how other countries address the same policy challenges related to school finance and, therefore, how to make well-informed policy choices that will lead to improved learning outcomes.

SABER-School Finance is a framework that guides the collection of standardized data to characterize and assess school finance systems around the world. The project primarily examines education finance policies, relying on key informants and official document review to map out the policy landscape. In doing so, it illuminates a key education topic under the direct control of education policymakers. Where possible, SABER-School Finance also incorporates measures of policy implementation at the central level, although other larger-scale surveys at the local and school level would be necessary to do a full analysis of implementation.

To describe the essential functions of an education finance system, SABER-School Finance collects information in five data collection areas: (i) School Conditions and Resources; (ii) Allocation Mechanisms; (iii) Revenue Sources; (iv) Education Spending; and (v) Fiscal Control and Capacity. These core areas follow resources for education throughout the complex funding cycle, although related activities do not always occur sequentially.

Figure 1: Policy Goals in School Finance

After identifying how a particular education finance system functions, SABER-School Finance determines the extent to which the system effectively provides resources so that all children can learn, using six policy goals widely shared across countries: (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 (see Figure 1). These policy goals reflect actionable ways that school finance systems can follow three well-known foundational concepts in school finance: adequacy, equity, and efficiency. Progress toward each of these goals is measured by policy levers, which are actions a government can take to improve its education finance system.

This country report uses this framework to characterize and assess the education finance system in Jamaica.

**School Finance in Jamaica**

Jamaica has made substantial improvements in basic education since independence in 1962, but providing quality education to all is still a challenge. Universal enrolment in primary education was achieved in the 1990s, and net enrolment rates for secondary school have increased steadily, reaching 84 percent in 2010. However, learning outcomes remain low. Results from national examinations indicate that less than half of primary school students are proficient in mathematics and just over three-quarters are proficient in reading. Results are slightly lower at the secondary level, relative to the proficiency standards. Jamaica has made recent efforts to strengthen education management through the Public Sector Modernization and the Education System Transformation programs, which support decentralization, capacity-building, improved monitoring and evaluation, increased efficiency, and accountability. The government also commits a large share of total expenditure to education; in 2010, public education expenditure represented approximately 12 percent of total government expenditure (compared to 11 percent in the Dominican Republic and 12 percent in Uruguay). An estimated 73 percent of total education expenditure was devoted to primary and secondary education (equal amounts for each level).

In Jamaica, the public sector has a large role in education; most primary and secondary schools are publicly managed and funded (see Figure 2). A few primary schools are privately managed and funded, and even fewer secondary schools are private.

Most of Jamaica’s education budget is determined by legislative process. School finance is very centralized, and the national Ministry of Education provides almost all necessary funding to schools. The Ministry of Education transfers the necessary funds electronically to schools and pays teacher salaries by check. The amount of resources available is determined by legislative process, and then allocated on a formula or program basis. Revenue to match allocated resources is generated primarily by taxes on income and consumption. The general trend of primary and secondary education expenditure has been increasing in real terms over the last five years (see Figure 3). Primary enrolment has decreased slightly during the same period, while secondary enrolment has increased slightly.

This report presents detailed assessments of Jamaica’s school finance system in each of the six policy goals according to the underlying policy levers, followed by a summary of the findings and policy options.
Jamaica’s School Finance System Results

Goal 1: Ensuring Basic Conditions for Learning

Emerging ●●●●

School finance systems should create an environment that supports and encourages learning. To do so, systems must provide adequate resources to ensure that all students have the opportunity to receive a high quality basic education, and set performance goals to drive the effective use of resources. 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. SABER-School Finance uses two levers to assess progress in this goal: (1) Are there policies to provide basic inputs? (2) Are there established learning goals?

(1) Jamaica has policies in place to require necessary educational inputs. Policies exist to provide basic infrastructure and qualified teachers in primary and secondary schools. The Ministry of Education’s Planning and Design Standards for School Buildings and General Facilities mandates that every school provide drinking water, electricity, and public toilet rooms. Recently, Jamaica set qualifications to become a primary or secondary school teacher at ISCED 5A (a Bachelor’s degree), which is in line with high-performing systems. However, Jamaica could improve its policies regarding learning materials requirements. Textbooks and computers are provided at the secondary school level only and libraries are not mandatory. Evidence shows that textbooks can have a significant impact on learning outcomes (Glewwe et al. 2007; Jamison et al. 1981; Heyneman et al. 1984), and libraries may provide access to textbooks and other learning materials. Using policies to stipulate which learning resources should be provided is in line with successful education systems such that of Ontario, Canada, where the school funding policy explicitly provides resources for qualified teachers, textbooks, librarians, classrooms, computers, and other inputs.

(2) By policy, there are performance goals that promote learning for primary school students, but equivalent learning goals do not exist for secondary school students. Jamaican primary school students are considered proficient if they master at least 80 percent of curriculum objectives in language arts, science, and mathematics. School performance is measured, in part, by the share of students that meet proficiency. Specific and limited performance goals, such as requiring that students show proficiency on a national assessment or that they be well prepared to enter tertiary education, allow successful school finance systems (such as France, Japan, and the Netherlands) to set targets and measure success in delivering quality education. The Jamaican government could develop performance goals at the secondary level (see Box 1 for spending and learning outcomes in Jamaica).

Goal 2: Monitoring Learning Conditions and Outcomes

Established ●●●●

Accurate information on learning conditions and outcomes is necessary for informed decision-making about spending. Data are particularly useful to encourage objective decision-making in challenging political economy environments. As more data become
consistently available, policymakers are more likely to use them (Crouch 1997). Knowing which inputs are available will inform school finance policymakers about how funds are being used at the school level, and access to assessment results will show whether funds are being used effectively. SABER-School Finance uses two levers to assess progress in this goal: (1) Are there systems in place to monitor learning conditions? (2) Are there systems in place to assess learning outcomes?

(1) Jamaica produces an annual school census, but the country does not collect adequate data on learning conditions, nor does it collect administrative data frequently enough. The school census gathers information on enrolment, student attendance, and teacher rosters once a year; however, this information should be updated at least every other month throughout the year so that budgets may be systematically allocated to represent school and student needs (Porta & Arcia 2011). Jamaica collects data on the availability of textbooks, libraries, and qualified teachers, but other important dimensions of the learning environment are not reported. The country has policies to ensure the provision of computers, drinking water, electricity, and functional hygienic facilities, but the system does not monitor whether these are actually present in schools. Successful education systems, including those of the United Kingdom and Ontario, Canada, document learning conditions in addition to enrolment and teacher information. Policymakers can use these data on basic infrastructure and instructional materials to redirect resources to the neediest schools or to take action in schools that are not providing the specified inputs (see Box 2 for an example from the United Kingdom).

(2) Jamaica’s national assessment system produces information on student performance that can inform resource allocation. Each year, national assessments are administered to all students in primary grades one through six but not the secondary level. The results from these assessments are made available to staff in the education planning unit as well as the Department of Student Services, School Inspection, and Quality Enhancement Circles. In addition to national averages, assessment results are reported for each school that participates, which provides more detailed information on student learning and makes more efficient resource allocation possible.

<table>
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<tr>
<th>Box 2. Collection and Use of School Facility Data in the United Kingdom</th>
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<td>In 2004, the United Kingdom incorporated analysis of school facility data into its school improvement framework. School inspections and self-evaluations were major components of this reform. The reform created the Office for Standards in Education, Children’s Services and Skills (Ofsted) which monitors whether schools meet standards in learning outcomes, student well-being, school facilities, and other areas. The central level uses these data on inputs, intermediate outputs, and outcomes to monitor progress towards national targets and to inform the external inspection of individual schools by the national Ofsted inspectorates. Schools are also able to analyze their performance with RAISEonline, a tool that provides interactive analysis of school and student performance, as well as comparisons to peers.</td>
</tr>
<tr>
<td>Source: Adapted from Ofsted. (2011). “Who we are and what we do.” Available online: <a href="http://www.ofsted.gov.uk">http://www.ofsted.gov.uk</a></td>
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Goal 3: Overseeing Service Delivery

Established ●●●●○

In addition to creating and monitoring education policies, an efficient school finance system should confirm that financial resources are converted into learning opportunities at the provider level. The provision of high-quality education requires adequate service delivery in addition to physical inputs. There is no guarantee that reported public expenditure on education even reaches schools (Reinikka & Svensson 2004), or that resources are used well to provide schooling. Therefore, it is imperative that school finance systems have mechanisms to measure the quality of service delivery at the school level. SABER-School Finance examines these mechanisms using two levers: (1) What mechanisms are in place to verify the availability of physical resources at schools? (2) What mechanisms are in place to verify the availability of human resources in schools?

(1) Jamaica has mechanisms to track number of school days and construction expenditure, but no system to document whether the prescribed textbooks are available at the beginning of the school year. Each principal is responsible for maintaining a Principal’s School Log Book in which the number of school days that occur in practice are recorded; this record is then submitted to the Ministry of Education. Although these data are not aggregated at the central level, the Ministry has records of how many days students spend in each
primary and secondary school (see Box 3 for an explanation of intended learning time in Jamaica). With regard to school construction, expenditure is monitored by an education authority and not just the concerned contractor, a practice which may reduce opportunities for corruption. However, Jamaica does not verify whether textbooks are available in schools at the start of the academic year. Delays in distribution of textbooks hinder learning and are especially common at the beginning of the school year. Reforms in both developed and developing countries have been necessary to provide textbooks to schools on time (Leung 2005). For example, in Washington, DC, a new procedure for textbook inventory increased the share of public schools with textbooks at the start of the school year from less than half to almost all schools (Labbé 2007).

<table>
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<th>Box 3. Intended Learning Time</th>
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<td>The length of Jamaica’s official school year is similar to other high-performing systems and countries in the region (see Figure 5). In Jamaica, the number of actual school days is tracked at the school level, but there is no system to collect and summarize these data centrally.</td>
</tr>
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(2) By policy, school directors monitor teacher attendance and absenteeism is penalized, but substitutes are not provided when teachers are absent. Instruction, and teacher attendance, is the most crucial factor in the use of education resources; student learning will not occur if teachers are not present. Since teachers may be dismissed for unexcused absences, this penalty, if enforced, should encourage teacher attendance. However, there is no policy on providing substitute teachers in case of absence, which may hinder learning.

Goal 4: Budgeting with Adequate and Transparent Information

Emerging ●●●

Although the Ministry of Finance often sets the overall allocation of resources for the education budget, sound budget preparation requires participation from many actors in the school finance system including central and sub-national education authorities. Throughout the process, information is essential to develop a budget that reflects sector priorities and to communicate that budget to education stakeholders. SABER-School Finance uses two levers to assess progress in this policy goal: (1) Is information used to inform the budget process? (2) Is the budget comprehensive and transparent?

(1) The Jamaican government uses some objective criteria to allocate resources for education, but future education expenditure is not estimated. The capital budget is allocated on a project basis, and the current budget is allocated on a program and formula basis. Under the per capita contribution for tuition fees formula, a fixed annual amount is allocated to each school based on the number of students in the school. Teacher staffing levels and related teacher payroll costs are then determined using the required student-teacher ratios (35 and 25 at primary and secondary levels, respectively). However, forecasts for future education expenditure are not prepared. In well-functioning school finance systems, estimates of education expenditure are developed for at least two future years, and include expenditure by current, capital, and functional classifications (see Box 4 for an example from Korea). Certain commitments of education resources may require recurring spending each year, whereas other spending such as school construction may preclude spending in future years. To allow for sustainability and predictability of funding, education expenditure should be considered on a multi-year basis (Andrews & Campos 2003).

(2) Budget documents classify expenditure in useful ways, but reporting could be more thorough. Jamaica’s education budget is categorized by administrative, economic, sub-functional, and programmatic classifications, so the Ministry of Education is aware of how much will be spent by each government authority, how much will be spent on current and capital needs, how much will be spent on primary and secondary
schools, and how much will be spent to meet each policy objective. Budget documents include the current year’s budget and an explanation of the budget implications of new policy initiatives. However, successful education finance systems also report on what share of the previous year’s budgeted resources was actually spent (outrun) and the amounts of revenue expected from various sources. Lastly, Jamaica publicly reports on the planned budget and its year-end execution, but it does not report on budget execution during the year or on availability of budgetary resources at the school level. If the government does not report on the education budget during the year or at the school level, funds could disappear before they reach their intended use.

Box 4. Success of the Medium Term Expenditure Framework (MTEF) in Korea

After initiating public finance reforms in the mid-2000s, Korea has experienced success using an MTEF. The national fiscal management plan (NFMP) covers five years and is revised annually for all sectors, including education. To prepare the NFMP proposal, the cabinet first determines the total planned expenditure and provides expenditure ceilings to each sector. Lastly, each sector prepares a budget proposal that reflects policy priorities and budget ceilings. The NFMP has helped to create consensus building across sectors and maintain fiscal sustainability.


Goal 5: Providing More Resources to Students who Need them

Established ★★★★★

Promoting equity in financing of education is essential for several reasons. Access and the opportunity for success in education should not depend on a student’s background. In many countries, however, socioeconomic background, as well as other non-school factors, is the most important determinant of completion and learning by students (Glick & Sahn 2009; Filmer 2008; Patrinos & Psacharopoulos 1992). Additional resources in schools may compensate for disadvantaged backgrounds (Baker & Green 2008; Rivkin, et al. 2005). Efforts on the demand side to reduce fees may increase the opportunity for both the poorest and girls to attend school (Kattan 2006). SABER-School Finance considers two policy levers that education systems can use to distribute funds according to students’ needs: (1) Are more public resources available to students from disadvantaged backgrounds? (2) Do payments for schooling represent a small share of income for low-income families?

(1) By Jamaican policy, socioeconomically disadvantaged students receive additional resources, but other types of disadvantaged students do not. Jamaica provides cash transfers conditional on school attendance to households with socioeconomically disadvantaged students through the Ministry of Labour and Social Security’s Programme of Advancement Through Health and Education (PATH). All households with qualifying students are eligible to receive funding, and students who suffer from socioeconomic disadvantages are identified through analysis of household survey data. However, high-performing systems also provide assistance to students with other disadvantages related to ethnicity, gender, native language, or geographic location (see Figure 6 for enrolment by gender). Jamaica does provide some additional public resources to students with visual, auditory, mobile, cognitive, and socioemotional special needs, but these services are only available in special schools. Education systems differ in how they address special needs—e.g., whether through special schools or through more inclusive education in mainstream schools. However, 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.

(2) By policy, payments for schooling in Jamaica are minimal and, when they exist, waivers are available for families who are unable to pay. There are no fees for tuition, Parent Teacher Association (PTA), textbooks, matriculation, or assessments at the primary level in Jamaica. At the secondary level, PTA fees exist, but qualified students are eligible for waivers of these fees. Official school fees do not represent a burden for the poor in Jamaica, which is in line with high-performing systems such as those of Ontario, Canada, Finland, Singapore, and Chile.

Box 5. Student Enrolment in Jamaica

In Jamaica, a greater share of the youth population is enrolled in secondary schools as compared to some countries in the region (see Figure 6). Enrolments are lower for males than females.
Goal 6: Managing resources efficiently

Established ●●●●

Experience in developing and developed countries has shown that providing resources is not enough to ensure good learning outcomes. Efficient tracking of inputs and outputs is an important step, but also not enough to guarantee good learning outcomes. Well-developed school finance systems include adequate resources and tracking of inputs and outputs and also, crucially, governance arrangements that can hold all parties accountable for using resources effectively for their intended purposes. Such mechanisms include, for example, ways of paying and monitoring teachers and education staff (Fiszbein et al. 2011). SABER-School Finance uses two policy levers to assess the efficiency of the expenditure process: (1) Are there systems in place to verify the use of educational resources? (2) Are education expenditures audited?

(1) Jamaica has a strong procurement framework for school construction in place, but personnel databases are weak. In line with best practices, the legal framework for procurement makes open competition the default method. In addition, opportunities to bid for contracts are publicly announced, and there is a defined process to submit and address complaints. However, the personnel database is updated only once a year. Ideally, the personnel database should be verified and checked against the payroll database at least every other month throughout the year. Teacher salaries represent a large share of public expenditure on education in Jamaica (see Figure 7), so it is important to manage these funds well and maintain a current database of those receiving salaries.

(2) Jamaica has strong internal and external auditing systems. Many actors are involved in school finance systems: 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. Measures to hold actors accountable are necessary to ensure efficient use of public resources throughout the system (see Box 6 for the use of payroll audits in Mexico). Jamaica and other countries with effective school finance systems use audits to provide regular feedback to education authorities on management of funds. In Jamaica, internal audit reports are issued annually and distributed to the Ministry of Finance and the Ministry of Education. Failed internal audits may result in intensified financial supervision. In addition, external audits are extensive, covering expenditure and revenue. Closer supervision is also a possible consequence of failed external audits. If enforced, policies prescribing such consequences should make audits more effective.

Box 6. Payroll Audits in Mexico

In 2008, Mexico began a regular quarterly audit of teacher headcount and salary transaction of teachers at the state level paid with federal resources. By the first quarter of 2010, anomalies in the payroll and personnel databases had reduced dramatically. Audits led to significant savings in education through corrections to the payroll in Mexico. Teacher salaries represent a large share of public expenditure on education in Jamaica (see Figure 7), making it important to manage these funds well.

Source: Adapted from World Bank (2012). International Experiences on Payroll Audits-Summary
Note. Available online: www.worldbank.org
Summary and Policy Options for Jamaica

Jamaica has made strong progress in improving access to education at both the primary and secondary levels. However, providing quality education to all remains a challenge. Quality of education is influenced by many factors, including school finance. Jamaica spends more on primary and secondary education per student as a share of GDP per capita than many of its regional peers and some high-performing systems do, but the country has fewer students who are proficient in mathematics and reading than these systems do. More effective use of education resources may boost learning outcomes. This analysis suggests that to improve resource use, it may make sense to focus attention on two policy goals—1) ensuring basic conditions for learning, and 2) budgeting with adequate and transparent information. Jamaica is stronger in the other school finance policy goals (see Box 7 for a summary of main findings).

Ways to Ensure Basic Conditions for Learning

There are a few measures that Jamaica could put in place to ensure basic conditions for learning:

> Make an effort to provide more learning materials to students. Currently, there are no official policies to provide libraries in primary and secondary schools, nor textbooks to students in secondary schools. Jamaica commits approximately 77 percent of its education budget to teacher salaries, which may crowd out spending on other essential parts of the learning process.

Ways to Budget with Adequate and Transparent Information

To strengthen the budgeting process and ensure transparency, Jamaica could:

> Improve budget and expenditure reports. Jamaica publicly reports only on its planned annual budget; it may be desirable to report on the in-year and end-of-year executed budget as well. 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.

> Update personnel and payroll databases more frequently. This may reduce unnecessary salary payments to teachers who have been transferred or retired.

> Develop forecasts of education expenditure across multiple years. Although medium term expenditure frameworks are usually developed centrally, the Ministry of Education could either begin to prepare its own forecasts in an effort to influence the central budget, or advocate for the Ministry of Finance to adopt the medium-term expenditure framework across sectors.
Acknowledgements

This report presents findings on the strengths and weaknesses of the education finance system in Jamaica. To collect the necessary information, Aubrey Pereira (Consultant) interviewed respondents with a deep knowledge of education finance in Jamaica and completed the SABER-School Finance data collection instrument developed in July 2012. The data were interpreted by Chelsea Coffin (Consultant, Education Global Practice) and Andrew Trembley (Consultant, Education Global Practice), under the supervision of Halsey Rogers (Lead Economist, Education Global Practice). Harriet Nannynjo (Senior Education Specialist, Education Global Practice) guided the work and contributed to the report.

References


The **Systems Approach for Better Education Results (SABER)** initiative produces comparative data and knowledge on education policies and institutions, with the aim of helping countries systematically strengthen their education systems. SABER evaluates the quality of education policies against evidence-based global standards, using new diagnostic tools and detailed policy data. The SABER country reports give all parties with a stake in educational results—from administrators, teachers, and parents to policymakers and business people—an accessible, objective snapshot showing how well the policies of their country's education system are oriented toward ensuring that all children and youth learn.

This report focuses specifically on policies in the area of school finance.