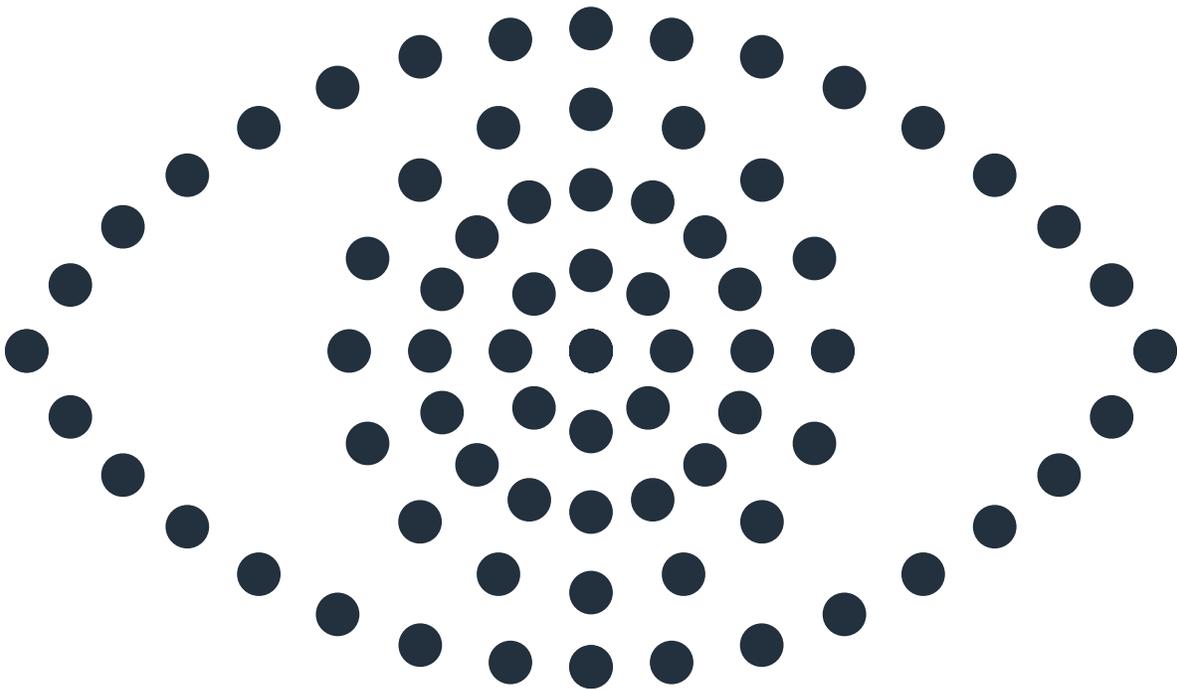


Beyond the Mirage:

How pragmatic stewardship could transform learning outcomes in international education systems

Topic: Toward effective and accountable education systems that deliver outcomes at reasonable cost for the tax payer



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Section IV: Case Studies

Despite little global progress in addressing the systemic challenges related to measurement, accountability, and flexibility, there have been a few cases of bold and innovative leadership. In this section, we've chosen to highlight four of these efforts, from Pakistan, Liberia, the Philippines, and India, as a means of showing what's possible. Each of these case studies is ongoing and imperfect, but contains important lessons that we attempt to illuminate.

Pakistan

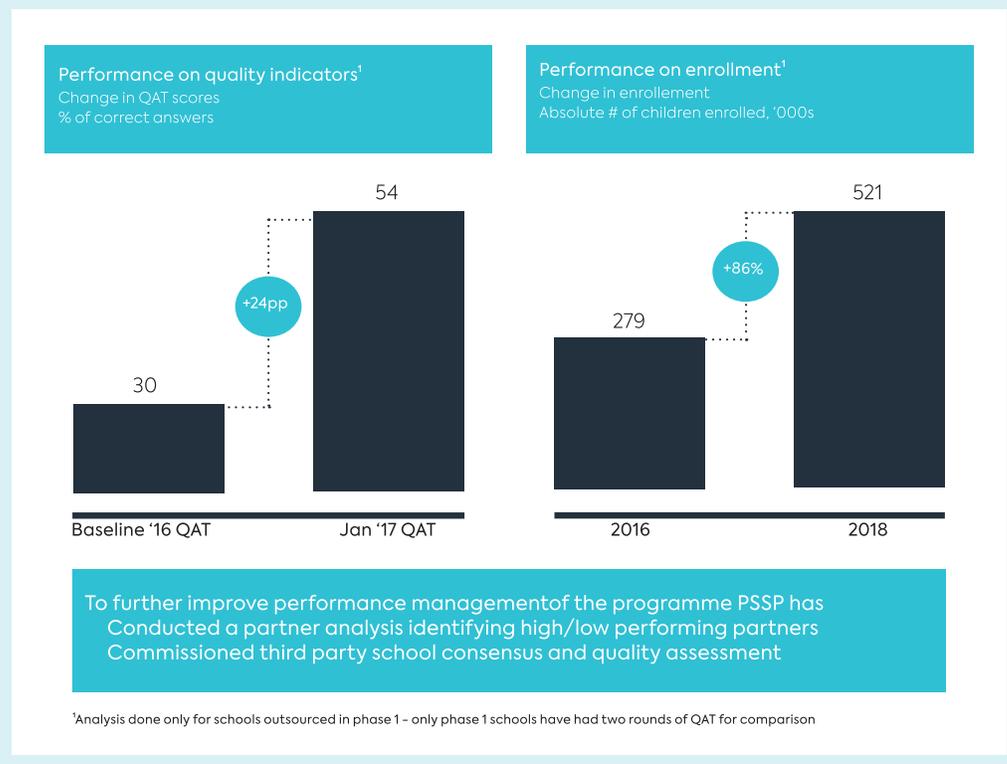
Punjab, Pakistan is an ideal case study for a fast reforming education system that is starting at the bottom of the rankings. Punjab, the largest province in Pakistan, has long been home to some of the most ambitious public sector reforms in the region, including the world's largest public private partnership (PPP) program. In the last decade, much of this can be attributed to its determined former chief minister, Shahbaz Sharif, and a competent set of high ranking civil servants.

The reforms in Punjab demonstrate significant efforts to address the systemic challenges outlined previously. Private sector education has long been a feature of the education system in Punjab, with almost all the elite and upper middle class children attending a wide variety of private education options. But the government decided to actively solicit the support of the private sector to improve learning outcomes for students in Punjab. Overall, through their efforts, between 2011 and 2017, Punjab used public money deployed through private sector actors to serve an additional 1.9M students in 8,596 schools.

From a measurement standpoint, the PEF uses a Quality Assurance Test (QAT) to test the schools once a year to ensure high learning standards. The schools were also given access to the best practice materials and trainings provided centrally by the government to boost quality. If schools repeatedly fail the QAT, they will be removed from the funding scheme within two years. This strict accountability is a necessary complement to the increased flexibility within the system.

In addition to PEF, the Punjab government launched the Public School Support Programme (PSSP) in 2015. PSSP is a new program which has outsourced government schools to operators of chains of private schools. These government schools were of the poorest quality – those with high enrolment and no teachers, or teachers but with students who repeatedly failed the annual Punjab Education Commission (PEC) exam. The PSSP has seen a dramatic improvement on quality indicators and additional enrolment as shown below in Figure 4. Operators from PEF believe that quality improvements are likely a result from the local accountability mechanisms stemming from parental pressure and a focus on management and oversight that the program provided.

Figure 5:
PSSP, Punjab's most recent PPP intervention, has yielded transformational results



Of course, no intervention is perfect. Although the early days have been promising, more needs to be done to ensure the validity of the quality assurance test (QAT) and ensure that all schools are vigilantly focusing on quality of learning in the school. More can be done to remove poorly performing private sector operators and there is still an enrolment challenge in getting the most underserved students, often in rural areas, into schools.

Punjab offers a beacon of hope, though, with over 3M students now enrolled and educated through publicly supported, privately managed schools, with early signs of learning progress. Ambitious school reform leaders and government leaders have multiple tools to leverage the power of the private sector to ensure that all students have access to high quality education. As reported by The Economist, “Shifting from ‘the politics of patronage’ to ‘the politics of performance’, in the words of Sir Michael Barber, would transform public services in poor countries. Pakistan’s reforms have a long way to go. But they already have many lessons to teach the world.”

Liberia

Another example of bold reform is the recent efforts in Liberia to reform the education system. Former education minister George Werner's op-ed defending the new program sets out the context for reform succinctly:

"Liberia's education system is in crisis. Our communities are still suffering from the effects of the long civil war and the devastating Ebola outbreak. Less than 60% of school-aged children in Liberia are in school, placing Liberia in the lowest percentile of net enrolment rates in the world. Those who do attend school may not fare much better: among adult women who reached fifth grade in Liberia, less than 20% can read a single sentence. Teachers, particularly those in remote areas where there are no banks, sometimes don't receive their salaries on time and therefore often don't show up. And it is our children, the future of our nation, who are suffering most.

To not act now would be to fail yet another generation of Liberia's children."

With this crisis in the education system in mind, President Ellen Johnson Sirleaf appointed George Werner to be education minister in 2015. His bold reform was a pilot program called Partnership Schools for Liberia (PSL) – a public-private partnership aimed at engaging private operators in the effort to provide more Liberian children with access to a high-quality education.

PSL Structure

The structure of the program addressed the challenges related to flexibility, accountability, and measurement laid out in Section III. In its first year, PSL conducted a mostly open, competitive bidding process that ended with eight operators working with 93 government schools.

The schools, while remaining public and non-selective, had private operators running them who were responsible for delivering the education. This offered a flexibility typically unseen in public education systems. Eight different operators, all with different approaches to teaching and learning, to the use of technology, to teacher training and development and more. These differences offer a set of fresh ideas and possibilities to a typically uniform public system. Operators from both inside and outside the country were allowed to apply.

Regarding accountability, Minister Werner set the program up to ensure that operators would grow or shrink based on their success in delivering student learning outcomes. Operators that proved successful would have the opportunity to take more schools each year, while operators that struggled would be phased out.

Beyond just the operator level, the PSL program attempted to provide accountability for teachers as well. While the PSL schools used government teachers and they were not prevented from being part of the union, the framework did allow for teachers to be removed if they lacked the requisite literacy/numeracy skills or had an unacceptable rate of absenteeism. Though far from perfect, operators could request the government to withhold pay for poorly performing teachers after attempts at coaching and improvement. These measures, especially where teachers are making \$100-\$300/month, are a significant step in helping schools ensure that teachers are accountable to their students.

Lastly, the entire structure of the PSL program focused on measurement, which was difficult to do in the hard-to-reach environments of some of the schools in the program. But the effort was significant. The Ministry of Education conducted an independent evaluation that involved a control group of schools that were randomly assigned. Efforts were taken to ensure that operators were unable to select schools or students to influence the comparison, which allowed for a very robust benchmark for performance. In partnership with the Center for Global Development and Innovations for Poverty Action, they designed math and literacy tests and conducted them one-on-one with a substantive group of students across both PSL and control group schools.

This is not to say the design was perfect. With governments still paying teachers, the accountability for teacher performance, while stronger than typical government schools, still had significant room for improvement. And the time spent on designing the system proved to create significant time delays and created a very rushed environment for operators to understand their assigned schools and implement their respective programs effectively.

Beyond just design challenges, there were also the practical challenges associated with implementation in resource-limited environments. For many of the operators, the cost of delivery was significant as funding was poured into training, technology, and resources to bring higher quality learning to these schools. While this is commendable, it is not sustainable, as true transformation will require cost-effective improvements in learning outcomes for students. Startup costs will inevitably be higher, but we must take early results with a grain of salt until they can be delivered more cost-effectively.

Lastly, measurement proved to be challenging in a variety of ways. With the schools in remote locations with weak connectivity and sometimes less-than-accessible roads, evaluators found it difficult to gather the data necessary. It took 8 weeks to gather baseline data at the beginning of the school year, causing challenges with the baseline being ‘contaminated’ by short-run treatment effects. Beyond just the difficulty of gathering data, separating the effects with small sample sizes and very different implementation paths led to conclusions that could best be described as suggestive at this point.

PSL Year 1 Results

Caveats aside, the program demonstrated significant promise overall. According to the Center for Global Development report summarizing Year 1 of the PSL program:

- Students in PSL schools scored 0.18 standard deviations higher in English and math than students in regular public schools. This improvement is the equivalent of 0.56 additional years of schooling for English and 0.66 additional years of schooling for math.
- Teachers in PSL schools were in school 60% of the time during random spot checks, 20 percentage points higher than in control schools. When in school, teachers in PSL school were engaged in instruction 49% of the time, more than 16 percentage points higher than in control schools.
- Combined, students in partnership schools spent twice as much time learning each week, when taking into account reduced absenteeism, increased time-on-task, and longer school days in PSL schools.

There is still a long way to go to validate and improve on these results. Teachers present 60% of the time or engaging in instruction 49% of the time is far from laudable. It is still far from evident that these operators can improve Liberian schools at a system level due to:

- Teachers – the government assigned PSL schools 37% more teachers than non-PSL schools, including having the first pick of graduates and being able to dismiss incumbent teachers. There's no doubt an improved teaching force must be a part of any solution, but the initial year of operation may not scale sustainably.
- Types of schools – the program in the first year was implemented within a list of eligible schools agreed by contractors, which limited the list to schools with higher staffing levels, better infrastructure, and more urban locations with better roads. Control schools also had these benefits, but it is important for the efforts to scale that improvements can be delivered in more resource-limited settings.
- Sustainable budgets – the budgets of several of the operators was far from sustainable, enhanced by donor funding¹ in an effort to launch the program successfully. While it's great that the program has drawn international donor interest in improving Liberian education, larger education reform in Liberia or other countries must be able to spark innovation and improvements within more stringent budget constraints.

Overall, the program's results are very promising. Even though the program is still in its infancy with only 93 schools in the first year and the results are still very preliminary, the PSL program is demonstrating that it is possible to approach education reform with urgency, pragmatism, creativity, and rigor. The program design has been thoughtful in improving flexibility, providing operator autonomy, and measuring systematically in an effort to improve the learning environment for Liberian children.

¹ Omidyar Network, who helped fund this paper, is an investor in Bridge International Academies

Philippines

Sometimes governments can use direct funding mechanisms to help achieve specific goals in their systems. The Department of Education of the Philippines embarked on an ambitious voucher program in the early 1980s with the establishment of the Education Service Contracting (ESC). ESC was founded as an experiment based on the belief that the private sector could deliver high learning outcomes for lower cost. By the 2012/13 school year, there were 722,000 students on the voucher scheme and 2,812 participating schools as part of ESC (World Bank, 2011). This allowed the money within the education system to ‘follow the student’ to the schools of their choice, which included private sector providers.

The results of the voucher scheme have been very positive. TIMSS results from 2003 concluded that the secondary school private sector outperformed the public sector schools significantly in math and science (The private school mean score was 426 points in math, while the public schools score 365). Further analysis by the World Bank examining the learning outcome results shows a high correlation of private sector participation on improved learning. When matching methods were used in the evaluations, the impact of the private sector was shown to be significant.

In fact, a 2011 report by the World Bank concluded that the ESC secondary school voucher program significantly improved quality through the education system.

Overall, student test scores in the Philippines are very low, though they have been improving over time. The available test scores suggest that private schools have the potential to improve learning outcomes significantly. The raw differential between private and public schools is huge, yet even after controlling for background and other observable differences, there is still a significant benefit in favor of private schools. More rigorous methods of controlling for the fact that attending a private school depends on selection do not diminish the private school advantage very much. Given that ESC students are likely to be less wealthy students than their peers, the results across the socioeconomic distribution suggest that less able students who are likely to attend private schools because of the extra funding they receive through the ESC are also likely to benefit academically. Therefore, enrolment in private schools by students who would otherwise have to attend public schools is likely to improve their scores and, thereby, the academic test scores of the Philippines as a whole.

Senior High School Voucher Structure

The program was so successful that the Department of Education decided to build off the long history of vouchers for senior high school students starting during the 2013 school year. In 2014, the government of the Philippines decided to expand the education system from a K-10 to a K-12 system, adding two years of senior high school to the prescribed curricula. The government decided to use the existing ESC program framework to deploy private sector actors to increase the slots of senior high school without stressing the government system. The ultimate objective was to finance the private school enrolment for 40% of the Senior High School cohort – targeting 400,000 students a year.

The Department of Education worked with the Asian Development Bank (ADB) on designing the program and securing a loan from the bank to finance the first 6 years of the vouchers. The voucher would be a permanent program - the amount would be tiered based on the region and the type of school. The government was clear about the primary need for the voucher scheme: that the expansion of grades would put too high a management and budget burden on an already stretched system. But there were other reasons as well, including minimizing upfront costs, making use of the existing private school network, and making the system generally more diverse and dynamic.

While the expansion has been successful in meeting the system's needs during a precarious switch to an expanded K-12 program, results on quality from the expansion into senior high school are still outstanding and mid-evaluation. Overall, the Philippines provides an excellent case study to show a positive example of starting a voucher program as an experiment and scaling up to full-blown implementation, while achieving cost savings. The flexibility of the program design to allow private sector actors to serve students ought to have been accompanied by a greater emphasis on accountability and measurement. This program could have benefited from a more robust focus on data - in fact, the recommendations of the World Bank report state that an increased focus on data, accountability, and implementation of the ESC would help further the impact and scope of the voucher program.

India

In some cases, governments and education systems can be spurred to change by outside actors. For The Education Alliance (TEA) in India, the entire purpose behind the organization's creation was to "help governments in India provide a quality education to every child, by facilitating effective partnerships between state and non-state actors." TEA believes in the power of well-structured public-private partnerships to move government schools from access to quality.

In order to put their theories into action, they had to find willing partners in government. After meeting with several government entities, TEA finally found a willing partner in the South Delhi Municipal Corporation (SDMC), a government entity responsible for over 580 schools in Delhi, the capital of India. In 2016, the SDMC formally launched the School Quality Enhancement Program (SQEP), an attempt to rigorously implement an effective public-private partnership model to improve learning outcomes.

SQEP Structure

The SQEP program was initially launched after a 1 year pilot in one school. In the first year of the formal program, 12 primary schools were brought under the umbrella with 8 operators. The SQEP was set up with the understanding that the benefits would have to be shown to the government instead of driven by the government. This meant that instead of depending on the capacity of the government to implement the program, TEA took on a role that served as the extension of the government, taking responsibility for the selection of partner organizations and the measurement of results.

Before being selected as an operator, TEA took each applicant through a rigorous due diligence framework that included visits to their currently running schools and even testing existing students. According to TEA, less than ½ of applicants were selected to take part in the program. Even amongst those selected, operators were given very few schools to start and then seen their MoUs with the government scale up on the basis of their initial results. TEA took on the responsibility for classroom observations, cohort analysis, and other ways of assessing the learning outcomes of the schools within the program.

Though the structure helped promote accountability amongst the operators, there was less of an obligation placed on the government entity. By not having to play an active role in the selection or measurement of the operators running the schools, government capacity was not forced to meet the stringent demands of running the program efficiently and effectively. In addition, the government system was not held accountable – government teachers and principals could not be fired and continued to be paid through the government payroll, with no incentives aligned to performance. After lobbying, TEA was able to secure the operator's ability to formally 'censure' teachers for poor performance and request their transfer, but these measures are far from enough to drive true teacher accountability.

That being said, despite the lack of accountability, the deep involvement of The Education Alliance and close tie to SDMC allowed them to lobby effectively for the government to meet their obligations in terms of resource investment into the government schools in the program. This means that the government has made attempts to staff schools at appropriate levels, make infrastructure investments, and provide scholarships and other forms of aid.

Lastly, the structure of the program created serious constraints to the autonomy of operators working in the area. Operators require flexibility to effectively implement their educational and operational programs in government schools. A few constraints emerged. First, it is federally mandated that schools in India be non-profit. Therefore, many low-cost private school operators, forced to operate in the shadows, were ineligible for the program as the SQEP naturally enforced compliance with this regulation. While TEA ensured that operators would be able to use their own syllabus, materials, and hire additional staff to implement their program effectively, operators could not replace any existing government teachers.

In addition, all additional investment came from the operators themselves, forcing them to seek philanthropic funding for anything above and beyond the resource-limited schools they inherited. This fundamentally affected the ability of operators, or the program more broadly, to scale up, as they were constrained by their ability to raise donor funds to expand their reach. Given schools where there were teacher shortages among other resource limitations, NGO operators had to find the budgets to be able to hire the staff to achieve the quality of education they desired. Despite these constraints, the interest in the program from operators and the ability to deviate from the typical government approach offers an interesting case study in the potential of these public-private partnerships.

SQEP Preliminary Results

While learning outcomes are the eventual goal of the public-private partnership, tracking learning in a rigorous fashion requires time and effort. The Education Alliance spent the first year creating a KPI framework for tracking performance, implemented a school observation protocol, and implemented a K12 school information system (SIS) to track school-level data in real-time, a first for schools in the program.

Lastly, TEA identified and selected a research partner to conduct student assessments. They worked with Gray Matters India, who “in partnership with Australian Council for Educational Research (ACER) has developed Indian Progressive Achievement Scale (IPAS) to monitor student learning achievements longitudinally and to compare nationwide benchmarks.” The test conforms to grade-specific learning objectives, the National Curriculum Framework, and use modern techniques employed in the largest international studies e.g. PISA.

The initial data in Year 1 showed that, as expected, baseline levels in the selected government schools were similar to the government average. As an example, the math results are shown below:

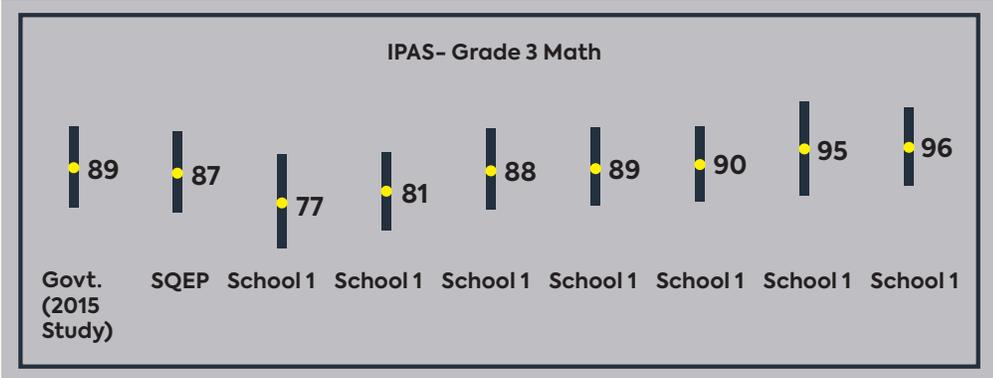


Figure 6: Baseline levels in the selected government schools were similar to the government average

For that same cohort, the results after a year in the program were significant. While government schools found students improve by 5 points on average in Math, Hindi and English, the average growth across the 3rd grade cohort in the 12 SQEP schools was 9 points in Math, 18 points in Hindi, and 17 points in English. The progress is in more than just test scores – student attendance has gone up from 55% to 73% in SQEP schools, 80% of classes are now at capacity as opposed to 62% prior to the program, and 96% of parents report extreme satisfaction on the academic performance of their children.

This is obviously preliminary, but is enough to show significant promise that the innovations these new operators bring hold potential within the government system to improve results. The program has since expanded to 12 partners serving 30 schools and 6,100 children. This is still a drop in the bucket, representing only 5% of the schools within the SDMC, which is one of three municipal corporations running schools in just Delhi. Still, it's worth following as the tracking mechanisms put in place by TEA will allow for us to understand whether these results can be sustained and further understand the causal mechanisms behind the learning gains.

For example, TEA has tracked that SQEP schools have been able to:

- Effectively lobby the government for an additional 6 crores in infrastructure investment, doing physical repairs and rebuilding school structures
- Create more space for teacher professional development, ensuring 20% of daily time is left for planning, regular performance feedback, and customized skill training sessions
- Partner with effective curricular initiatives, bringing music, theater, and play-based leadership development into the curriculum

Of course, more time is required to further delve into how these and other changes are driving improved student learning, but just having this level of data awareness is a critical first step. As with other case studies highlighted here, the biggest question mark for the SQEP program is the scalability. Given the importance of donor funding to this initiative and the lack of a plan for government capacity or funding to be a long-term driver of the program in Delhi, it is difficult to see a path to having this initiative cost-effectively reach millions instead of thousands of students. The Education Alliance is in discussions with the Ministry of Human Resource Development, the overall entity responsible for education in India, as well as the World Bank, on potential means of expanding the elements of this program on a more widespread basis.

It's important to note that this entire effort was conceived and pitched by The Education Alliance, not at the government's behest. With this program effectively being served on a platter to governments, it shows the importance of pragmatic, visionary stewards at the helm. For education system stewards that are seeking dramatic change, there are opportunities for support in structuring programs that effectively meet the needs of parents and students and allow governments to ensure accountability through a rigorous approach to measurement.

Conclusion

Each of these four case studies highlights unique efforts to improve the delivery of learning for students. All of them are still very much in the midst of implementation, and the true success of these programs won't be known for years. In fact, the lesson across all of these case studies is the need for a robust approach to measurement. This has proven one of the most challenging aspects of reforms, especially in resource-limited settings. Still, lessons can be taken away around the potential structures and reforms that can spur innovation and true partnership to drive improved performance across the sector.