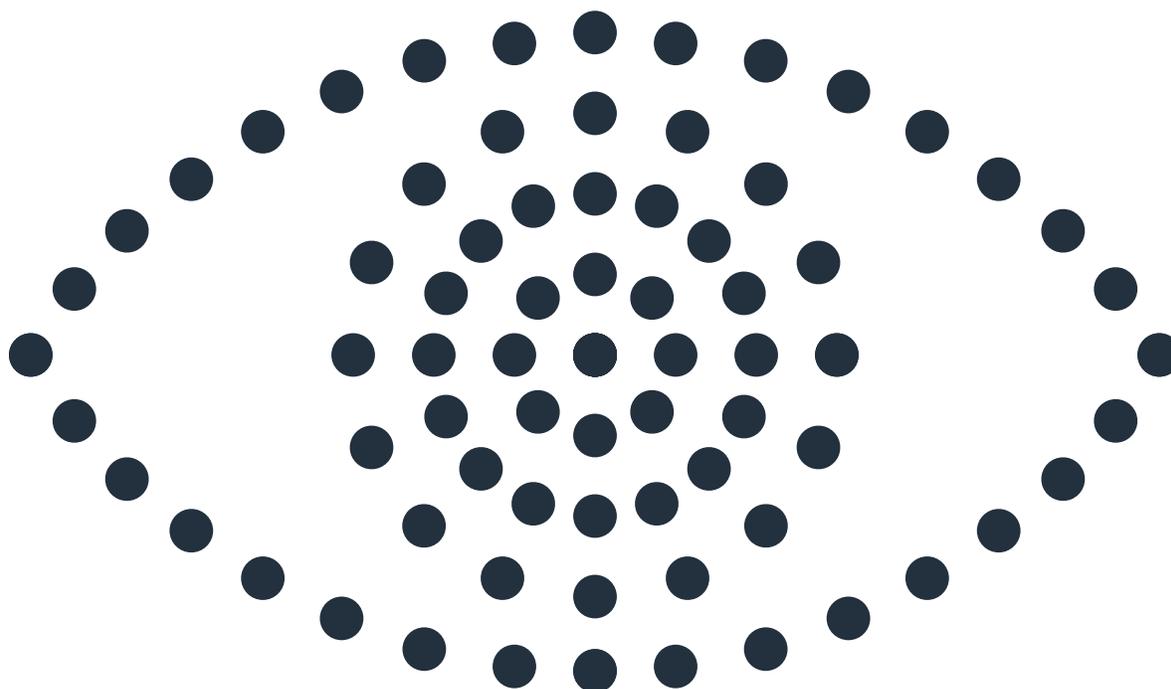


Beyond the Mirage:

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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About the Authors

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Katelyn is an investor, entrepreneur, and consultant with experience across the U.S., U.K., and emerging markets. She is a founding Partner of Delivery Associates, the leading public sector advisory firm focused on implementation of large-scale reform and the use of data and monitoring technology. She was an integral member of the of Punjab Schools Reform Roadmap team for many years starting in 2011.

Previously, she co-founded and served as the Managing Director of the Pearson Affordable Learning Fund, a \$65M venture fund that invests in education and edtech companies in emerging markets. Katelyn also led the initial strategy and implementation of Pearson's global efficacy strategy with Sir Michael Barber. Previous investments and board memberships include SPARK Schools, Avanti Learning Centers, APEC Schools, Omega Schools, and HarukaEDU. Katelyn is a frequent published author in education including *Alive in the Swamp: Assessing digital innovations in education*, *Oceans of Innovation: the Atlantic, the Pacific, global leadership and the future of education*, and *The New Opportunity to Lead: A vision for education in Massachusetts in the next 20 years*.

Prior to Pearson, Katelyn was a consultant at McKinsey in San Francisco and graduated with high distinction in economics from Duke University. Katelyn is a Kauffman Fellow and was named to Corporate Venturing Power List and Forbes 30 Under 30.

Arvind Nagarajan

Arvind is an education investor and operator with experience working around the world sourcing, evaluating, and operating education companies. Arvind is the Regional Managing Director for the USA region of the International Schools Partnership, a company that owns and operates of over 40 private schools around the world.

Previously, he served as the Investment Director with the Pearson Affordable Learning Fund, where he led investment activity in India and Latin America as well as financial and strategic analysis of other opportunities across the portfolio. He helped raise an additional \$50M commitment to the fund and worked closely with several of the portfolio companies, including as a board member at Omega Schools in Ghana, SPARK schools in South Africa, Zaya Learning in India, and Karadi Path in India. He is the co-author of *The Inner Workings of Affordable Private Schools*, a practical guide for entrepreneurs and investors in the space.

Prior to Pearson, Arvind worked at the Clinton Health Access Initiative, where he worked on malaria treatment programs primarily in Nigeria and Uganda. Arvind also was a consultant at Bain & Company. Arvind received his BA in Economics and Political Science from Yale University and his MBA from the MIT Sloan School of Management.

Ross Lescano Lipstein

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Before working at Summit, Ross worked for the Pearson Affordable Learning Fund and across other organizations in international development focused on both education and agriculture, spending time especially in Ethiopia, India, and South Africa. Ross has an MBA from Stanford, an MPA/ID from Harvard, and an M.Ed. from the Broad Center.

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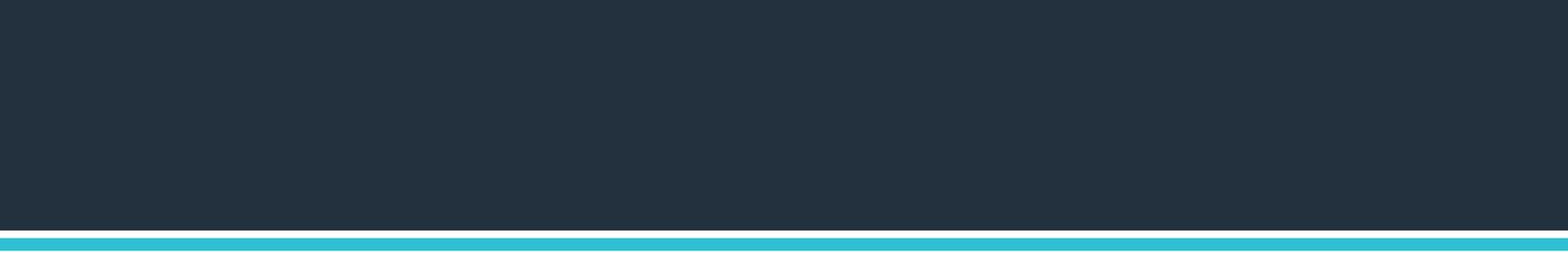
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Foreword I

By Sir Michael Barber, Chairman of Delivery Associates

There are few if any more important challenges facing humanity than securing high-quality universal education for all children and young people. We know that a good education is the key to liberating individuals, creating successful communities, enabling flourishing democracy and building a global economy that is both growing and sustainable.

“Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”

While there has undoubtedly been progress in the last generation, especially in enrolling more children and young people in schools than ever before, no-one who looks at the current outcomes can be even remotely satisfied with the state of affairs. The Sustainable Development Goal for 2030 is “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”; if that is to be achieved in little more than a decade then a rapid and radical transformation will be required. At the moment there is no sign of such a transformation on the horizon.

Nevertheless, the authors of the *Beyond the Mirage* bring a message of hope. They argue that there is a potential way forward and that the barrier to progress is not a lack of resources, though of course investment is vital, but rather an energy-draining and fruitless ideological battle. The warring factions ignore the evidence – or cherry-pick; and they trade tired arguments which generate heat and dust rather than light and clarity. The entire debate is stuck in a rut; meanwhile there are some 60 million children out of school altogether and many hundreds of thousands, who might spend most days in a building called school, but who don’t learn anything. Hence the need to move beyond the mirage.

The authors of this provocative and inspiring text bring the fresh eyes and insights of a new generation to the challenge of universal education. Leave ideology at the door, they argue, and examine the evidence. Instead of armed camps advocating either purely public or purely private education, they suggest looking for the best combinations of both public and private. Not either/or, they say, both/and. Instead of considering the issues as a matter of inputs, they argue, look at the outcomes. Judge schools and systems less on structure and more on results.

Not either/or, they say, both/and. Instead of considering the issues as a matter of inputs, they argue, look at the outcomes.

This means, as they go on to argue, rethinking the role government plays. Government should be the funder of universal education which ought to be free to children and families; government should be the regulator, setting the goals and the rules for the system to work, in order to secure high quality and equity; but government does not need to be the sole provider of education and indeed might find it helpful to bring in a range of different providers. They point to several examples of governments acting in this way and, as a result, significantly improving outcomes.

I salute the clarity with which they have set out the argument. Everyone who wants to see the SDG delivered – really delivered as opposed to talked about – should engage with the case they make. Of course, there will be plenty of room to refine it, build on it and go beyond it; that is as it should be. The fundamental point is that it is time to leave the tired, old debate behind and to put outcomes for children ahead of ideology. It is time to move beyond the mirage.

Foreword II

By George Kronnisanyon Werner, Former Education Minister of Liberia

I knew that we couldn't continue to do the same things we had always done and expect better results.

With communities still suffering the crippling effects of civil war extending over decades, the Ebola outbreak hit our country with unrelenting severity. It was in the midst of this unprecedented crisis that I took the helm of the Education Ministry in Liberia in 2015. Thousands had died and schools had been closed for over a year. I knew that we couldn't continue to do the same things we had always done and expect better results. Collectively, we had to face our challenges head-on; I would need to take risks and be disruptive.

Not every country faces the same challenges we faced in Liberia, but a similar challenge faces most of Africa and South Asia. Fast-growing countries with young populations are reaching a critical moment, a tipping point. These countries are in the midst of demographic upheaval - the majority of their populations are less than 18 years old and desperate for knowledge and skills to provide a decent living for themselves and their family. This is the greatest opportunity of our time, though also the greatest challenge. How do we ensure that a high-quality education is available to everyone?

Beyond the Mirage takes this question and provides the frameworks and concrete examples to help education ministers form their strategies and deliver for students. The paper doesn't pretend to have all the answers, but it does examine efforts like ours in Liberia to highlight the principles that must underlie a successful approach and examines pitfalls and false dichotomies along the way.

Getting the relationship between governments looking for improved learning outcomes and the private sector providing services can be tricky. When we embarked on creating the Partnership Schools for Liberia (PSL), we had no blueprint. As a result, we had to learn quickly and iterate by trial and error. I hope that *Beyond the Mirage* provides inspiration and helpful tactics for other Education Ministers facing similar challenges within their education systems. Among other things, the paper sets out case studies and models for education ministers to create a powerful strategy to improve the quality of education quickly. Most importantly, though, *Beyond the Mirage* makes clear the vision, courage, conviction, and political will required to get beyond the polemic into the implementation.

While setting up the PSL and determining the optimal regulatory framework, I found that the private sector knows what it wants and is willing to make decisions quickly. The private sector has resources readily available that the public sector doesn't have. To be successful, the public sector needs to operate in a similar fashion by being clear about what it wants and being decisive in getting there. As the authors discuss, this will often require support - to build capacity, to measure outcomes, to provide accountability, among other things. Mistakes will be made, but the biggest mistake would be to stick with an inadequately resourced and dysfunctional status quo for fear of change.

The demographic boom across Africa and Asia means the time is ripe for system reform to improve our children's opportunities for meaningful learning. *Beyond the Mirage* provides a roadmap for action to help political leaders embark on this journey. As I said when launching the PSL in Liberia, to not act now would be to fail a generation of children.

I hope that Beyond the Mirage provides inspiration and helpful tactics for other Education Ministers facing similar challenges within their education systems.

Mistakes will be made, but the biggest mistake would be to stick with an inadequately resourced and dysfunctional status quo for fear of change.

Preface

We, the authors, were previously associated with the Pearson Affordable Learning Fund (PALF). We have invested in for-profit education companies and school chains serving children from low-income families in the emerging markets, particularly Ghana, South Africa, and the Philippines. We are non-ideological and support all types of schooling that deliver outcomes. At PALF, we had seen a gap in private sector investment in innovative education and recognized the need for new approaches to improve the quality of education for low-income families. The schools of today will undoubtedly not be enough to meet the needs of 21st century students; the private sector allows for more experimentation and innovation in creating the schools of tomorrow. If the schools or services we invested in can demonstrate better outcomes than government schools at costs per student which are the same or lower, then they open up the opportunity for system-wide reform.

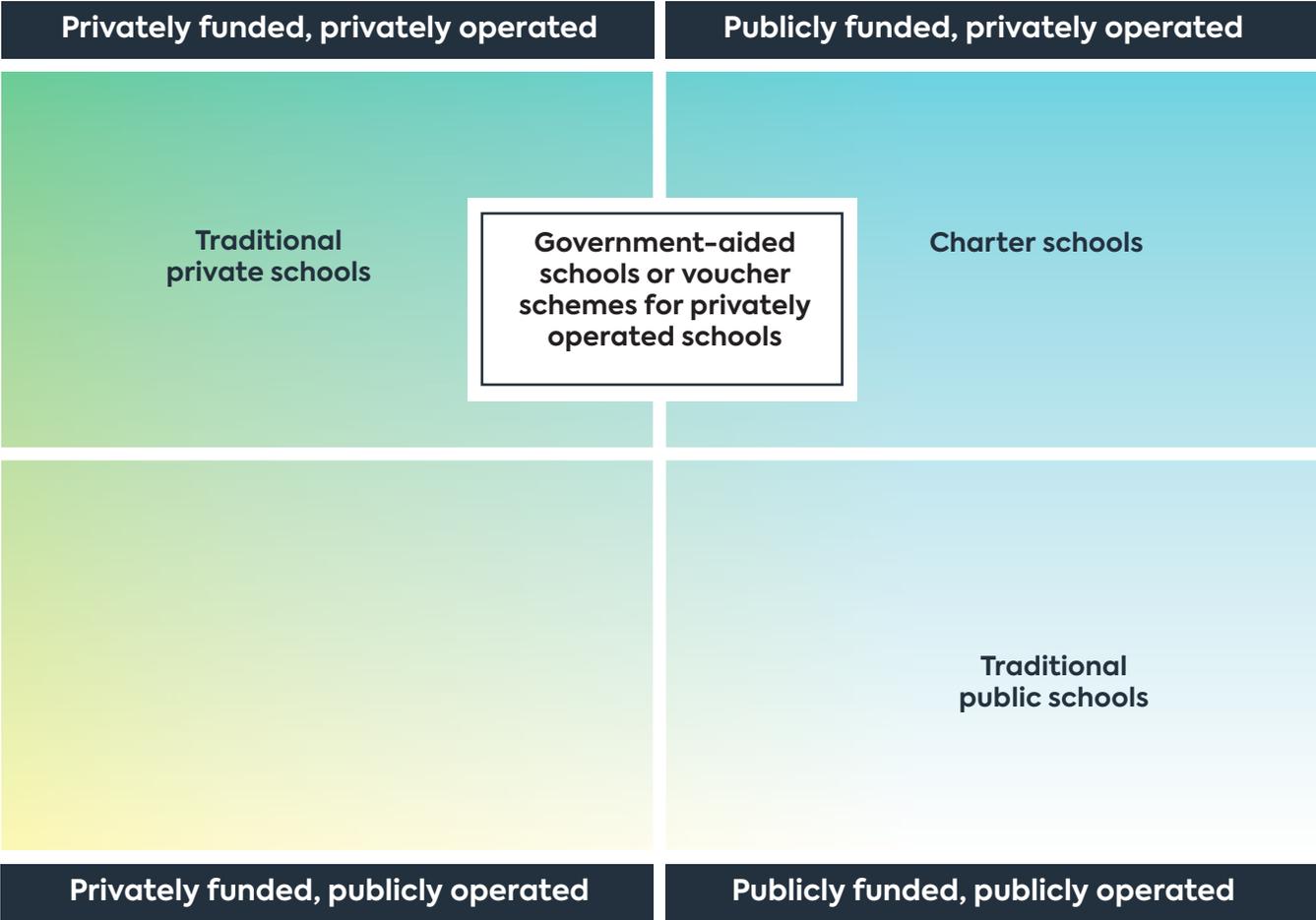
Before we begin, we want to outline a set of guiding principles and terminology that underlie the discussion that follows. We have five fundamental guiding principles:

1. The role of education systems is to provide a **quality education** to **all** children and young people.
2. The success of education should be **measured based on outcomes**, rather than spending or inputs
3. **Ideology should be left at the door.** The public vs. private debate has gone on for 40 years – it is time to leap beyond that by looking for fruitful combinations. As long as good outcomes are delivered, we are agnostic as to the type of school. Good outcomes should be viewed on both the school and the system level. Positive outcomes and innovations should be sustained and scaled throughout the system.
4. System reform requires a **sense of urgency.** We cannot sit idly as children continue to suffer from poor education in the hopes that economic forces or the status quo will eventually improve.

5. We believe in *learning from global experiences* while *adapting to local contexts*. This is an acknowledgement that frameworks are only a starting point for a comprehensive implementation path at the level of a country or system.

Regarding terminology, we think it most appropriate to categorize schools in terms of their funding sources and how they are operated,

Figure 1: Types of schools characterized by funding sources and operation



Preface

as indicated in the figure below.

When we use the word ‘private’, this is not limited to for-profit schools but rather all non-government schools, including community-based, religiously-affiliated, or NGO schools. Throughout this paper, ‘private’ schools will refer to any privately-operated schools, regardless of their funding source. We will refer to the ‘public system’ referring to all forms of public funding and ‘public provision’ to refer to publicly operated schools.

Additionally, we are not researchers, but practitioners. This is not a comprehensive review of the literature or the evidence, although we do cite studies from the leading academics and researchers in this space. Monitoring, evaluation, and research are vitally important in education but often these studies are inconclusive, not replicable, or require long time horizons. Analysis is important in the role that it plays in active management and implementation toward achieving the goals of the systems.

Lastly, while we discuss vouchers, it is important to note that vouchers are simply one mechanism to allow parents to select and pay for the school of their choice with government providing some or all of the funding. Vouchers take many forms, including universal vs. targeted or single rate vs. variable rate, and it is beyond the scope of this paper to weigh in on the most effective form of implementing a voucher scheme.

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Thank you to former Liberian Education Minister George Werner for reading and commenting on drafts of the paper. We are grateful for your validation and perspective given your leadership as an operator in Liberia. Thank you to former Punjab Chief Minister Shahbaz Sharif for your bold vision and willingness to drive accountability throughout the Punjab Education System.

Thank you to our mentor, Sir Michael Barber, for your support, leadership, and guidance in this paper and generally throughout our careers. This paper would not be possible without you.

Executive Summary

Education ministers and their leadership teams to shift from thinking ‘my job is to run the public education system’ to ‘my job is to ensure that all children receive a high-quality education.’

Emerging market education systems require dramatic improvement to prepare their young citizens for economic prosperity in the modern era. *Beyond the Mirage* argues that improving quality quickly will require education ministers and their leadership teams to shift from thinking ‘my job is to run the public education system’ to ‘my job is to ensure that all children receive a high-quality education.’ Education system leaders should see themselves as stewards of the system, seizing opportunities to work with private sector innovators to test new ideas, expand quality school choices, and challenge existing complacency. These actions will ensure the whole system adopts a mindset that focuses on learning outcomes as the core objective of their actions and activities. We call these leaders pragmatic stewards. They often see the private sector as collaborators and potential partners and they work to create programs and incentives aligned to reach their common goal: every student learning and achieving her/his potential.

One of the key areas where we see increased student outcomes is the growing private school sector. Of course, just as there are high performing government schools and low performing government schools, there are high performing private schools and low performing private schools. This report focuses on the developing success of the private school sector towards improving quality and highlights examples of public education systems that have adopted innovative programs to expound on the success of the private sector. We aim to look for combinations of private and public actors and seek to avoid false dichotomies by focusing on improving performance of both sectors, together. For the public system to work effectively with the private sector, the public system needs to be capable and focused on system outcomes. This essay illustrates three models that country leaders and education ministries could implement on the spectrum of education reform models from pure public provision to complete privatization.

While we don't advocate for any specific model, what we've seen work best is experimentation with a framework that lies towards the middle of the spectrum (i.e. a mix of public and private provision) and is tailored to the local context. Significant progress can be made quickly when pragmatic stewards ensure their entire system is focused on achieving specific goals and objectives that are measured and monitored regularly. Pragmatic stewards will consider a range of factors when choosing which models to adopt; the three models we've seen be most effective at driving transformation at scale are the following:

Drive Delivery: Improve and reform public provision with a focus on results and outcomes while leaving space for private sector school alternatives.

Combine Forces: Contract with private school management organizations and/or operators in a public private partnership arrangement.

Unleash the Citizens: Institute a variable-rate voucher system with public and private providers and appropriate quality measures.

What we've seen work best is experimentation with a framework that lies towards the middle of the spectrum and is tailored to the local context.



Each of the models can be successful but pragmatic stewards know that the challenge doesn't end at picking a strategy. Careful and deliberate attention must be paid to the details of implementation. In the essay, we expound on five actions that critical to implementation. These actions include:



1. Enable a range of different innovative models to 'join the cause' by allowing for both public and private provision. Learning innovations can also diffuse throughout education systems when private providers have room to innovate. Allowing a wider range of competent operators and investors to 'join the cause,' even if outside the public system, makes success more likely.
2. Ensure all providers are held accountable to delivering learning and contributing to system equity.
3. Help relevant providers improve their delivery through support tools. Building the capacity of actors in the system is as critical a system task as holding them accountable.
4. Reliable information on outcomes should be easily accessible to increase system accountability and enable informed resource allocation and so that parents can make informed consumer decisions
5. Insofar as resource allocation rewards success in delivering outcomes, decisions should be based on reliably-obtained data.

Around the world, we've seen bold education leaders introduce new regulatory frameworks to stimulate private sector involvement in education reform. In each instance, they used these pillars to design their innovative schemes to unleash the power of the private sector and drive forward implementation. While no attempt is perfect, we deep dive and highlight both the positives and the areas needing improvement through four case studies:

- **Liberia:** Partnership Schools for Liberia
- **Punjab, Pakistan:** Punjab Education Foundation and PPSP
- **Philippines:** Vouchers for Senior High School expansion
- **India:** The Education Alliance

Traditional tools and methods are not sufficient to transform education systems quickly enough. Pragmatic stewards should employ the private sector to help achieve their goals. As with all government-led reform, getting the strategy right is only 10% of the challenge; the rest lies in the relentless grind of implementation. No system can be successful without a central function that monitors results, solves problems, and employs judgment, all while remaining focused on outcomes. Leadership starts at the top and it's up to the political will of presidents, prime ministers, and education secretaries to see beyond the mirage.

Section I. The View from the Top

Standing in the parched courtyard of a large primary school, the Minister of Education sighed deeply as he looked at what surrounded him. It was only his second month as the country's Education Minister, and already he felt the pangs of pressure as he visited educators and families whose aspirations were not being met by the nation's education system.

The orderly appearance of the building and facilities belied the lack of teaching and learning going on inside. In a Class 3 classroom to his right, he saw benches overstuffed with students who had started the year eager to learn and now looked apathetic as they robotically recited phrases their teacher had written on the blackboard. To his left, Class 2 students were chatting and playing with each other; their teacher had not shown up for class today. This was the sixth time this had happened this month, according to the principal.

The Minister grimaced as he thought back to the meeting he had earlier that day with a few parents whose children attend the primary school. "Their English is terrible," they complained. One mother, who spoke almost no English herself, described being disheartened when her eleven-year-old son, Peter, spoke on the phone to his cousin Ama who attended a private school across town. Peter could not carry on the conversation in English; she had to find a better school for him or he would fall further and further behind in his studies and have less of a chance of earning a decent living.

Peter's mother frowned as she recounted this story to the new Minister. Her family could barely afford the fees for uniforms, supplies, and exams that were a compulsory investment that seemed to have no return. She needed Peter to be learning. She wanted desperately for him to have more opportunities than had been available to her. She wanted him to be able to participate in the new economy and to make a better life for himself and his family.

The urgency of better education

The Minister reflected on Peter's mother and on his broader challenge as he paced through the courtyard. His country's economy had recently been growing at a robust 6% per year, but it had struggled to diversify away from commodity production towards manufacturing and services. Unemployment hovered around 8% and was twice as high for 15-24-year-olds. More than one in four citizens still lived below the poverty line, and two in every five were under the age of 15.

Meanwhile, employers in the country were citing human capital as their greatest need and most limiting constraint, and foreign businesses viewed a prepared labor force as a prerequisite for investment. The nation ranked around 90th in the World Economic Forum's Human Capital Index, behind several other low-cost destinations for foreign direct investment in Asia and Africa.

The Minister understood – as the President constantly reminded him – that their country needed to lead the region in the quality of its education, and, as half the population was under the age of 25 the future of a whole generation was at stake. The Minister kept coming back to the question: how can significant progress be made quickly?

Over the past decade, his predecessors had made some important strides. They had helped the country achieve nearly universal primary school enrolment; from 65% to 90% net enrolment in ten years. They had consistently spent around 6% of GDP on education, relative to a regional average of 4.5% and a global average below 5%.

However, while students were enrolled in primary school, they did not seem to be learning enough at an acceptable pace. Nearly half of all primary students failed to demonstrate minimum competency in math and English, and the majority did not demonstrate proficiency. The results were even more discouraging at the secondary level. Only 45% of students were enrolled in secondary school, and test results revealed that the country's students scored below their regional peers in reading, mathematics, and science. Even by the age of 15, 20% of students lacked basic literacy skills, and 40% lacked basic numeracy skills.

The Minister understood that the future of a whole generation was at stake. The Minister kept coming back to the question: how can significant progress be made quickly?

What could be done?

He thanked the Principal who shrugged helplessly. Climbing into the ministerial car to head back to his office, he thought again about the students he'd seen and the parents he'd spoken with that morning. He knew his government should help them and the millions of their compatriots with similar aspirations and frustrations, but he wasn't sure what the best method to do so would be.

The government had been pouring in resources for years, but the problems just seemed to be growing in scale and complexity. Most schools still lacked sufficient resources – those that did have textbooks often did not have enough and, in any case, they were woefully out-of-date. Many primary schools had unreliable access to electricity and potable water. Over 75% of the Ministry of Education's budget went directly to teacher salaries, and most increases in spending went straight to raising wages for teachers. All teachers received the raise whether or not they had done their job. There were limited systems in place to evaluate learning and teacher performance, and the existing exams were insufficient, infrequent, and unreliable.

Technology solutions, too, had proven elusive. The Minister had been shown attractive tablets with learning games, and he knew that technology held great promise to transform education. But there seemed to be a wide gap between vision and reality. Implementation had been rocky. Connectivity and functionality were absent more often than they were present. His predecessor had piloted a program with technology company that had seen the computers go unused and educators struggle, not knowing how to integrate them into the school day and the curriculum. Too often he saw computers sitting untouched in a separate room, new enough to be wrapped in plastic but old enough to have gathered dust.

Technology solutions, too, had proven elusive. But there seemed to be a wide gap between vision and reality. Implementation had been rocky.

Minister had also spoken with local education officials about their challenges at regional and district levels. They, too, were frustrated by the quality of education they saw in the schools and heard about from parents and community members. They pointed to the increase in enrolments with pride, saying they had done what their superiors asked. When they called a few of their colleagues ‘hardworking and honest’ they were conveying a clear message about the rest. More than anything, they conveyed a sense of resignation; they had no hope that things would change for the better.

The Minister shook his head. It was hard to know where to begin. There was so much to improve. And his country really needed those improvements. With the scale and complexity of the challenges facing him, what could he do?

With the scale and complexity of the challenges facing him, what could he do?

Over the past several years while working on affordable education across the low-income world, we have met many dedicated public servants like this Minister of Education and seen his (or her) challenges again and again in different forms and contexts. We have written *Seeing Beyond the Mirage* for them, and for the millions of officials, advocates, educators, investors, entrepreneurs, and families around the world who could help them build a better reality.

We chose to call this report *Seeing Beyond the Mirage* because governments have often responded to the urgent demands for better education using the existing tools and processes right in front of them, the elements they first see when they look at their education system. Budgets allocated. Students enrolled. Teachers hired. Buildings constructed and books purchased. We have seen money and attention focused on the inputs to the public education system, without much focus on ensuring the delivery of learning outcomes and the improvement of life prospects for students. As our Minister observed, while the challenges just keep increasing in scale and complexity, outcomes, when measured at all, are barely moving. Progress is a mirage.

We chose to call this report *Seeing Beyond the Mirage* because governments have often responded to the urgent demands for better education using the existing tools and processes right in front of them.

What, then, lies beyond the mirage? Simply put: pragmatic stewardship.

Ideology is left at the door.

This mindset change increases the options and resources at the disposal of the leaders which otherwise might go untapped and unnoticed.

What, then, lies beyond the mirage? Simply put: pragmatic stewardship. By stewardship, we mean that leaders acknowledge that they are guardians of the current education system and that it is their responsibility to leave it in better shape than they found it. By pragmatism, we mean having a clear vision of what ‘better’ looks like, having a strong sense of what is working and what isn’t – based on hard evidence – and, then prioritizing actions that matter, with a keen eye on implementation and measuring real results. Ideology is left at the door – pragmatic leaders need solutions to problems that will allow them to achieve improved learning outcomes for all children. These leaders know that there is no time to waste. That they must move quickly, ambitiously, and take a few calculated risks in pursuit of the ultimate goal.

When education leaders look past the mirage of inputs toward hard-edged pragmatic stewardship, the world of available strategic options simultaneously expands and prioritizes. Crucially, pragmatic stewardship shifts the task from managing the public system to ensuring that every child, regardless of what kind of school they attend, gets a quality education. This mindset change increases the options and resources at the disposal of the leaders which otherwise might go untapped and unnoticed.

To fulfill their role as pragmatic stewards, education leaders require more than just increased resources for implementation: they require a bold vision, a well-defined strategy, robust data systems, and broad political and civil support. We hope this report can serve as an initial roadmap. With it, we believe leaders like our Minister could transform their education systems and deliver a better future for their country. The stakes are incredibly high, both for him and for all of us.



Section II. The Past Thirty Years

Education reform over the past decades has often been focused on driving enrolment into the existing government sector, increasing budget allocation, and ensuring gender equity. Progress on enrolment has been slow but effective. Students are, for the most part, in school today, which is a significant achievement. Differences in enrolment and outcomes between the genders have tightened, particularly in younger years. In general, government leaders have given greater priority to education by allocating more capital to the sector. However, students are often not learning enough in school to dramatically improve their prospects in the 21st-century economy.

While education system leaders have focused on out-of-school children, lower and middle-class families have evaluated their schooling options. Parents have been frustrated with the poor performance of traditional government schools and voted with their feet. As incomes have risen, the aspiring middle-class population in low-income countries have invested their disposable income into private education options they believe to be better for their children.

In this section, we review the major trends in education reform over the last 30 years. We will examine both the policies that have been pursued from the top of the system and the shift in perception and actions from parents and students on the ground. The goal in outlining these trends is not to belabor shortcomings in the public sector. Instead, we aim to show that it's impossible to expect that only focusing on government improvement will meet the needs of all families, especially given the large numbers in low-cost private education. Additionally, given the cost-effectiveness of low-cost private schools, systems must start to consider how to make this sector a more effective partner in creating change and making faster progress towards improved quality.

Expenditure, enrolment, and gender equity have increased

Low-income country governments have increased their expenditures on education significantly since signing up to the Millennium Development Goals (MDGs) at the turn of the century. In Sub-Saharan Africa, governments spent over \$43.3B on education in 2010, up from \$10.5B in 2001 (One, 2013). India, education expenditures rose from 2.8% of GDP in 1997 to 3.9% in 2012, growing in absolute terms from \$11.8B to \$70.8B (World Bank, 2014).

Governments have directed the majority of this increased spending to building infrastructure and hiring teachers. In addition, some governments have provided conditional cash transfers (CCTs) to qualifying households, with the transfers contingent on the children in the household attending school. CCTs, infrastructure investments, and various other government initiatives have steadily increased student enrolment in primary school over the past two decades (Banerjee, 2011). In 1999, 82% of primary age students in low-income countries were enrolled in school, and this increased to 90% in 2010 (ONE, 2013).

Furthermore, enrolment has increased for both genders, greatly narrowing the gender gap. In 1986, 71% of girls and 85% of boys were enrolled in primary school in low and middle-income countries. By 2012, 89% of girls and 91% of boys were enrolled. In secondary school, an enrolment gender gap of 6% in 1998 had halved to 3% by 2005, though the gap has remained stagnant at that level since then (World Bank, 2013).

While great strides have been made, an enrolment challenge persists as 54 million children globally are still not in primary school (UNESCO). Of those that start primary schools, only 60% will complete the full course of study in sub-Saharan Africa (UNESCO). Many of those students live in conflict-ridden areas, tribal communities, or suffer from a severe disability. Of course, that gap should be closed and international efforts are helping to do so. Specific, last-mile interventions will be necessary to fix these context-dependent challenges, which is outside the scope of the solutions in this paper.

Being in a classroom does not deliver what countries ultimately need from their education systems: more knowledge and skills for their citizens.

Learning remains low and with little upward trend

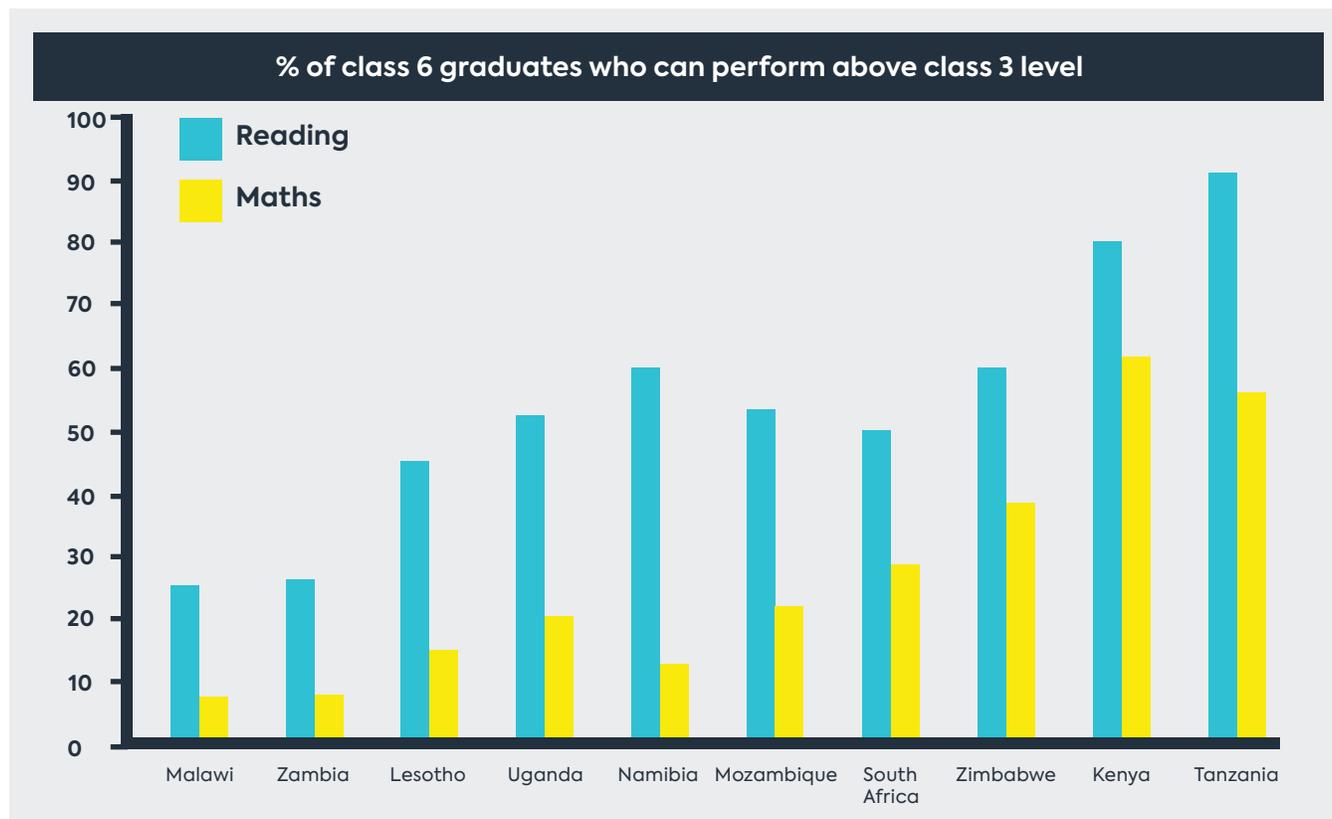
While more students are enrolled and more money is being spent on each of them, there is little to show when it comes to actual learning. Being in a classroom, or worse, just on a register, does not deliver what countries ultimately need from their education systems: more knowledge and skills for their citizens. UNESCO Institute of Statistics finds that 80% of students unable to achieve minimum proficiency levels are in classrooms but not learning.

The learning data from India is telling. ASER, a highly respected, autonomous assessment unit, administered a test that showed only 48% of class 5 students in rural schools can read a class 2 text in 2014 and 26% can complete a class 3 division problem. Results are similar in many other low-income countries. In Bangladesh, class 5 graduates incorrectly answered 50% of oral questions assessing very basic math skills, while their peers who had no formal schooling incorrectly answered 67%, implying merely 3 percentage points gained per year of schooling. Figure 2 shows the basic learning levels of class 6 graduates in several Sub-Saharan African countries:

Figure 2:

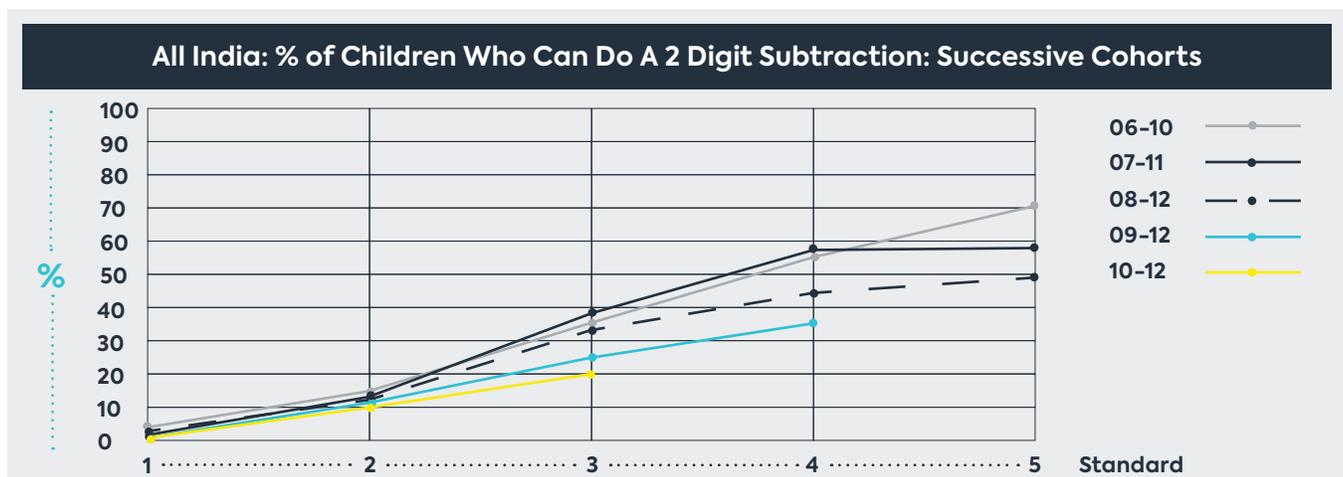
In many African countries, achievement levels remain low.

Source: SACMEQ (2010) via Pritchett (2013)



Learning results are not only low; they also show little evidence of an upward trend. In fact, in India, ASER results from 2013 show that children know less at each grade level than their peers did in previous years. In basic subtraction, for example, cohorts of Class 4 students assessed in recent years are doing worse than previous years, with the trend remarkably consistent in its downward trajectory (see Figure 3).

Figure 3: Indian students perform worse on basic subtraction than in previous years



Finally, to highlight just how striking the divergence has been between enrolment and learning, we present maps below (via Acasus online data tools) of the world by the number of children in each country (bubble size) and enrolment/learning levels (color). Figure 4 makes the point easily visible: in large swaths of Africa and south Asia basic levels of learning are not being achieved in the traditional public sector.

Figure 4: Most children in the world are enrolled in primary school, but few learn



Unfortunately, even mastering the basics of numeracy and literacy will not be sufficient for meaningful economic contribution and empowerment. In the 21st-century economy, the importance of advanced cognitive skill development will only be amplified. The following macro-trends will ensure broad-based learning in the 21st-century remains of vital importance:

- **Routine low-skilled and semi-skilled work is increasingly being automated**
- **Global integration has made a low-cost, well-qualified human capital base a prerequisite for sustained foreign investment and international competitiveness**
- **Digital skills are increasingly required to engage with the internet and technology for 21st-century tasks**

Entrepreneurs and innovators, always significant drivers of growth and employment in an economy, require increasing levels of sophistication to compete with global incumbents. An effective workforce will be able to self-learn and use access to information to keep pace with technological innovation and new tools. All of this raises the bar for what citizens expect from public expenditure into the education system and what parents demand from their schooling options.

‘Quality’ in education can be persistently difficult to define in both relative and absolute terms, and we will not make a holistic attempt in this paper. A baseline of quality can be understood to be the mastery of literacy and numeracy in primary education. The definition of quality learning beyond these basics will be context-dependent and expectations by parents will differ locally. Given these expectations and the consistent low learning levels, the decision of where to enroll their child is a critical one for parents.

Rather than wait for change, parents are choosing to send their children to affordable private school options

Parents have taken notice of the inadequate quality of education in many government schools. Increasingly, they are voting with their feet, choosing to send their children to private schools. These private schools are often small establishments with low fees, run by local community members. Around the world, families with little disposable income are choosing low-cost private schools they can afford to obtain a better education for their children. (Tooley and Longfield, 2014)

Responding to this dynamic, low-cost private schools (LCPSs) have sprung up across the low-income world. As many as 65% attend private school in Hyderabad, India, 74% in Ga, Ghana and 75% in Lagos State, Nigeria.

Responding to this dynamic, low-cost private schools (LCPSs) have sprung up across the low-income world. As many as 65% attend private school in Hyderabad, India, 74% in Ga, Ghana and 75% in Lagos State, Nigeria (Dixon and Tooley, 2005, SABER, 2014). In Uttar Pradesh, India, nearly 50% of rural primary-age children attend private schools, double the percentage doing so in 2005 (ASER, 2013). Across rural India, 29% of 6 to 14-year-olds are now in private schools, up from 19% in 2006 (ASER, 2013). This is overwhelming evidence that parents understand how important education is to their children's prospects; and many of them have decided that private alternatives are more likely to meet their aspirations.

Government records of schools may not even capture the extent of private school participation as many private schools are unregistered and unrecognized. In Lagos, only 26% of private schools are formally approved (Dixon, 2015). In fact, 40% of private school heads in Lagos do not even consider registering given the extensive requirements (Härmä, 2013). Such decisions are common in many low-income countries, and experts estimate a "very large proportion" of low-cost private schools operate outside of formal regulatory and oversight systems (Tooley et al, 2011, Ashley et al, 2014).

Just as striking as rising private school enrolment, has been the average performance of students in these schools. Below we discuss several reviews of the evidence from academic studies on the performance of the private sector on education quality. These studies include differing mixes of representation of for-profit and fee-paying schools under the umbrella of private schools. Additionally, evidence of definitive quality of the private sector is still emerging. Academic studies often require long-time periods and control group manipulations for research methods; no single study can be prescriptive.

Ashley and coauthors summarized evidence from low-cost private schools in their 2014 report for the UK Department for International Development, drawing the conclusion that “pupils attending private school tend to achieve better learning outcomes than pupils in state schools”. The evidence from 21 studies is that 14 of them confirm “private school pupils achieve better learning outcomes than pupils in state schools” while in 6 the evidence is neutral. There is only one study that the authors found negative evidence for private school pupils achieving better learning outcomes than those in government schools, and even in that one, Tooley and Longfield note in their review that this categorization is based on misinterpretations of the data.

Data from several countries in Asia and Africa suggest that LCPSs demonstrate, on average, significantly better teaching methods and better learning outcomes, even after controlling for selection bias (Ashley et al, 2014, Tooley et al, 2011). This data reflects scores from assessments as well as observational studies, and many control for both observable and unobservable household characteristics. However, the learning outcomes in low cost private schools could still be better; outperforming government schools still often means that the average performance is still well-below grade level. Few would argue that the outcomes in either sector are high enough for the 21st century.

Data from several countries in Asia and Africa suggest that LCPSs demonstrate, on average, significantly better teaching methods and better learning outcomes, even after controlling for selection bias.

The studies also find that LCPSs are often at least as equitable as comparable government schools. With regard to income and class, studies indicate that private schools geographically reach the poor, and that significant proportions of the poorest and most disadvantaged groups in society are using private schools. Pal and Kingdon (2010) also show that Scheduled Caste and Scheduled Tribe students in India had a higher relative marginal learning rate in LCPSs than government schools, suggesting private schools can help close learning gaps between the disadvantaged and the most advantaged. Similarly, evidence shows LCPSs improve education for girls in low-income countries – in some countries or states, a greater proportion of girls are in private rather than government schools (Tooley Longfield, 2014).

Finally, the evidence is strong that LCPSs are generally more cost-effective than their government counterparts. Most studies find LCPSs cost less per pupil, sometimes over 50% less, relative to government schools serving comparable populations (Ashley et al 2014, Tooley Longfield, 2014). A key driver of this difference is the lower salaries that most LCPSs pay their teachers, while still demonstrating greater teacher effectiveness and learning outcomes. The improved performance is often attributed to a commitment or diligence on the part of teachers by being present and teaching. Moreover, while, for families, government schools are generally less expensive, they are not always substantially so. Many require non-trivial fees for uniforms, supplies, and other items. While LCPS results per student are compelling, results on a cost per student basis are more dramatic still. Even when looking at costs to parents only, the cost of sending a child to government school is often a substantial proportion of the cost of sending a child to private school (Tooley Longfield, 2014).

This evidence is not presented to engage in a debate on whether low cost private schools or government schools perform better. This data illustrates that low cost private schools, without significant resources and operating largely in the shadows, have emerged as a significant participant in the education sector and one whose performance cannot be dismissed. Therefore, when deciding strategy on how to improve the results of the system overall, it is prudent to consider how we might be able to create a system that enables private participants that deliver quality learning to flourish.

Conclusion

The last several decades of education reform have delivered great strides in increasing resource allocation, improving enrolment, and closing the gender equity gap. However, these victories have not been enough to translate into consistent, meaningful learning outcomes across most education systems in low-income countries.

System leaders who approach reform with a lens of pragmatic stewardship would recognize three important facts. First, many parents are frustrated with the poor performance of the traditional government sector. Second, it is not realistic to believe that focusing purely on the government sector can deliver for all families; the numbers in low cost private education are simply too large to believe that all parents can or will be drawn back to the government system. And third, given the evidence on the cost effectiveness of LCPSs, it is worth asking how they might become partners and collaborators in solving a system's challenges.

Section III. Understanding the Challenges

The past three decades in international education show increased government expenditure with little progress in student learning. The natural next question is: why? Every President and Prime Minister wants the same outcomes from their education systems: economic growth, engaged citizens, improved social well-being, and an upward trajectory of prosperity. Leaders recognize that these benefits are derived from learning, specifically from the acquisition and application of knowledge and skills. Why, then, have the majority of education systems seen inadequate progress, and, despite that, made minimal changes in their approach?

When examining the ways in which education leaders choose to steward their education systems, three fundamental challenges emerge:

1. Inadequate measurement
2. Insufficient accountability
3. A lack of adaptability

To better understand how to address each of these challenges, we should examine each of them in depth.

Inadequate measurement

Measuring learning in any context is nuanced and complex but it's particularly difficult at scale and in low- technology environments. Learning outcomes are challenging to observe and to compare across groups – learning takes time, often happens in a step-function, and assessments of learning are expensive and tough to administer. Understandably, leaders choose to focus on observable and measurable variables for learning: money spent, teachers trained, materials and supplies procured. In focusing on inputs, the low-income world was following in the footsteps of high-income countries in the 1960s and 70s. The thinking in both cases was that the extra investment upfront would translate into improvements in quality. This, unfortunately, was often not the case. Ultimately, the metrics for success and what could be tracked was primarily based on inputs – the key levers that governments could easily measure.

In most public education provision schemes in low-income countries, junior civil servants oversee provision and report to higher-level officials at local, then regional, and sometimes federal levels. To provide the necessary oversight, senior officials require timely, detailed, and reliable data to accurately evaluate the performance of local managers in delivering improvement in learning outcomes. This is rarely the case.

Given the state of data systems, most education systems still struggle to reliably gather the basics, let alone more complex pieces of information. Instead, officials focus on what they can observe and what senior officials have historically prioritized, which includes tangible inputs (e.g., spending, enrolment registers) and noticeable anomalies (e.g., bad press, a risk taken and failed). This attitude feeds up the chain. Lower-level managers place more emphasis on detectable elements, since they know that is what their senior managers will also emphasize. The result, as observers and participants of public provision schemes will recognize, is a chain of diffused accountability in which many officials are motivated to focus more on how something appears rather than how it performs – hence the mirage at every level.

It is important to recognize that what has been measured has seen progress. As noted in Section 2, there have been substantial increases in expenditure, enrolment, and equity. This was the case in both high-income and low-income countries. However, this only reinforced the tendency to focus on inputs for major global institutions such as the UN and the World Bank. For decades, international organizations and local leaders highlighted expenditures as a primary metric by which to measure countries' education systems. Beginning with the MDGs and continuing with the Dakar Framework for Action in 2000, countries set ever-higher ambitions for spending without rigorously tying those ambitions to how the money was spent and what needed be achieved. With the Dakar Framework, 164 countries committed to spend 7% of GDP on education by 2005 and 9% by 2010 (One, 2013).

To provide the necessary oversight, senior officials require timely, detailed, and reliable data to accurately evaluate the performance of local managers in delivering improvement in learning outcomes.

Unfortunately, the current trajectory of input growth is not going to get countries anywhere close to their ultimate learning objectives. For example, achieving 100% universal enrolment for most Sub-Saharan African countries will only increase the percentage of students above a minimum competence level by 0-10% on average, whereas helping students already in school achieve even moderately better learning results (e.g., moving from Uganda's level to Kenya's) drives gains of 20-50% on the same metric (Prickett, 2013). Similarly, Kremer et al. examined 30 rigorous interventions in primary education from around the developing world, in Latin America, Africa, and Asia. They found that when interventions provided more-of-the-same educational inputs without changing pedagogy or accountability, they consistently had insignificant effects on students' performance. This should not diminish the importance or challenge of enrolment gains, but they do represent the mirage of success, since they are based on figures we can easily see.

Only now, leaders the world over are beginning to alter their strategies to account for growing evidence of the limited relationship between the input proxies and learning outcomes. Part of the reason is that learning outcome data remains stubbornly difficult to obtain, particularly in a timely and actionable form, despite becoming more available. In addition, many low-income countries are still struggling with creating scalable systems to track and measure more complex efforts. Initiatives such as the Learning Metrics Task Force, an international committee of experts and stakeholders, developed key global learning metrics across various domains of education, but these are recent developments and implementation on the ground has lagged. Recently, the World Bank has released a comprehensive data set that measures education quality in these markets (Patrinos 2018). Hopefully the new focus on learning outcome data will push for improved consistency and reliability of outcome measurement systems.

It's important to note this is an area where low-cost technology, if implemented well and embedded in the system, can make great strides. We've seen and will discuss emerging success stories that include the use of low-cost tablets and phones that can power software to time-stamp, geo-tag the work of education system monitors. Software can also organize and clean the data, and distribute it in a way that can be digested and understood (Punjab PMIU).

Insufficient accountability

Without the high-functioning forms of accountability, achieving transformational change is impossible. All players in the system must have 'skin in the game' and be held responsible for their part in improving the quality of education provision. Unfortunately, most education systems suffer from ineffective forms of accountability that have prevented, rather than aided, positive change.

In most public education systems, school leaders are theoretically held accountable by elected officials or officials acting on their behalf (rather than, for example, by the groups they serve directly such as parents or the local community). In practice, this has often meant that public education providers have incentives that are tangential, at best, to learning outcomes. These incentives push leaders to act in response to pressures from interest groups, which have a vested interest in the status quo. Among these groups, teachers unions have often had the strongest voice. In most low-income countries, teachers account for as much as one-third to one-half of public sector employment and are a well-organized and significant voting bloc (Bennell, 2004). The Nigeria Teachers' Union, for example, has 300,000 members and exerts significant political influence. Large central unions with high membership levels represent teachers in many countries, including Ghana, Kenya, Sudan, Tanzania, Brazil, Colombia, and Mexico (International Labour Officer, 1991). Also, in many rural areas, teachers have the responsibility of staffing voting booths, where many illiterate voters need help in casting their votes. This responsibility carries great influence with the rural vote and makes politicians wary of conflict with teachers or their unions.

Regarding performance evaluation, public school teachers are rarely held accountable for attendance, let alone performance in the classroom. Instead of being accountable to head teachers or school management, teachers in countries such as India face a disciplinary process that resides at the state level.

Given this powerful political presence, it is perhaps not surprising that public school teachers have a large influence on the priorities, goals, and structures of education systems. This influence has generally led to increased spending on education, over 90% of which typically goes to teachers. Regarding performance evaluation, public school teachers are rarely held accountable for attendance, let alone performance in the classroom. Instead of being accountable to head teachers or school management, teachers in countries such as India face a disciplinary process that resides centrally at the state level. In fact, in India, less than 1% of head teachers seeking to have teachers transferred for repeated absences have been successful (Chaudhury, 2006). It is therefore not surprising to find teachers “do not feel accountable to school managements, parents, or the wider community.”

Studies of absenteeism highlight this lack of accountability: in 2006, for example, Chaudhury and coauthors found teachers in Bangladesh, Ecuador, India, Indonesia, Peru, and Uganda had an average absentee rate of 19%. In India, one in four teachers do not show up on any given day, and, among those who do show up, one fourth are not engaged in teaching activity. These accountability arrangements are difficult for elected officials to change, as they often rely on teachers’ influence for votes. Up against these powerful interest groups, the parents’ voice often goes unheard and unacted upon. Rather than their voices becoming a powerful lever for change in the public system, instead we’ve seen parents who have voted with their feet by opting for the low-cost private sector.

Beyond teachers themselves, the public education system is often managed by a cadre of administrative civil servants who are responsible for running the system, including teacher training, teacher recruitment, examination administration, and overseeing the management of the schools. These administrations are grown in recent years and the evaluation of individual civil servants is often not tied directly to the performance or the output of the section of the system they oversee. Where pragmatic stewards have introduced accountability measures for the local parents there has been a positive correlation with improved student outcomes (Patrinos, 2017).

A lack of adaptability

Systems require flexibility to innovate and thereby progress and evolve to new conditions and expectations. Bending the trajectory of learning outcomes-per-cost will require education systems to operate in a radically different way than they have in the past. Innovations in pedagogy and school models have the potential to transform the capacity and address resource constraints that schools face. Lower costs, greater personalization for students needs, and, of course, improved learning are all the potential benefits when adaptability works well.

One source of innovation that has significant potential to bend the learning outcomes-per-cost trajectory is technology. Technology can help teachers tailor their classroom management and student interaction, as well as be a source of professional development and training to teachers. Adaptive software and individualized learning plans can help students learn at their own pace using world-class content and advanced algorithms. This isn't to say technology has all the answers in education – the evidence on the use of technology in education is mixed and highly dependent on the degree of embeddedness in schools– but it's important that we continue to innovate and scale-up efforts that are delivering outcomes for students.

Promising innovations will need to be developed and deployed at scale if they are to have a substantial impact on learning outcomes and on the cost-effectiveness of education systems. Yet, public providers are not well positioned to develop and deploy such innovations. Public exposure and bureaucratic processes result in government schools becoming risk averse. In any case, success from taking a risk has limited upside, as teachers and administrators are rarely rewarded for achieving better results or standing out. Public systems are designed to deliver relatively uniform services at scale.

Public exposure and bureaucratic processes result in government schools becoming risk averse. Public systems are designed to deliver relatively uniform services at scale.

Rigidity can hinder potentially transformative approaches that could yield tremendous benefits for student learning. It can take away access to tools for low-income students that are already proving effective for their wealthy, advantaged counterparts. For example, we have heard several governments and international donors promote the view that only the public system can deliver increased equity. A report by the Special Rapporteur on the right to education that was submitted to the UN General Assembly expressed deep suspicion of non-state education, particularly for-profit providers, and concluded that education is a public good that must be provided only by the state (Singh, 2015).

As discussed in Section II, the argument that inequity increases when alternative providers step in is not supported by evidence. Indeed, the research suggests that focusing on purely public provision delivers outcomes that are both insufficient and inequitable. Only the poor suffer when public provision fails since the wealthy have a choice in schooling and do not depend solely on the government. In addition, as we will address in Section V, several policy solutions exist to ensure private actors do not exacerbate inequities. Effective regulation of the entire sector should contribute to increased equity. These options have been deployed in a few pioneering systems across the world, and highlight the value of pragmatic, evidence-based leadership to address countries' pressing education challenges.

A lack of flexibility can manifest in practical ways as well. System leaders, by structuring rules and guidelines in certain ways, can affect who can become providers, who those providers employ, what the incentives are, how those providers engage with students and families, and what levels of quality and equity they deliver. In the past few decades, leaders have sometimes chosen to use their regulatory power to impose excessive requirements on non-public providers who want to start and grow schools.

A few of the erroneous regulations have included, for example:

- Stringent teacher accreditation requirements based on degrees rather than in-classroom assessment
- Requirements that providers own the property on which they build schools
- High registration costs for new schools, with long waits and annual renewals
- Expensive physical property requirements e.g., laboratories, boundary walls, playgrounds

These regulations all have several features in common. First, they regulate only the inputs that leaders hope, all too often in vain, will affect the quality of education.

Second, they significantly raise the cost of serving students, thus inadvertently contributing to the low learning/high-cost constraint that education systems already face. Third, they create additional bureaucratic processes for which providers rely on civil servant discretion to move forward, creating opportunities for corruption and side payments that have been observed in many low-income country education systems. And fourth, they raise the barrier for innovative social entrepreneurs to test new models and provide an external challenge to the incumbent systems (Fielden, 2008).

The primary result is that non-public education providers are severely constrained. Paradoxically, input based regulation often increases the challenge for the private sector to improve the quality of delivery (Fielden, 2008). With so many hurdles, many private providers choose to operate small, informal schools under the radar of regulators. Instead of seeking to professionalize and grow operations as parental demand increases, they often turn away students or overcrowd existing spaces to avoid burdensome requirements.

Furthermore, providers are not able to innovate freely and to find ways to bend the learning/cost ratio when they face such tight controls over inputs. Too often regulations stand in the way of developing or scaling such cost-effective innovations. The irony is that leaders put many of the regulations in place purportedly to assure quality and equity in education delivery. Regulations that are too narrow and inflexible in their design can have the opposite intended effect.

Conclusion

Past education reform efforts were largely driven by input-informed goals with a strategy heavily shaped by ideology and political pressures. Challenges with flexibility, accountability, and measurement have made limited inroads into the regulation conversation. Systems have sought to achieve their goals by directing funding to public providers while keeping the non-public sector small and largely informal. This has resulted in the narratives we have observed over time: inputs have increased but learning outcomes remain low, and parents are increasingly seeking alternatives even though those alternatives often lack significant resources.

However, several bold leaders have pioneered innovative approaches to address these challenges and deliver a focus on learning. In the next section, we explore a few case studies of courageous leadership and the resulting evidence of the efforts to date. While no approach has been perfect, these case studies hold significant promise and are critical to inform the future. Thirty years from now, we hope it will be possible to describe how systems improved access to education for all children and that we will have ensured that each of those children learned the necessary skills and knowledge to thrive in the 21st century.



Section IV: Case Studies

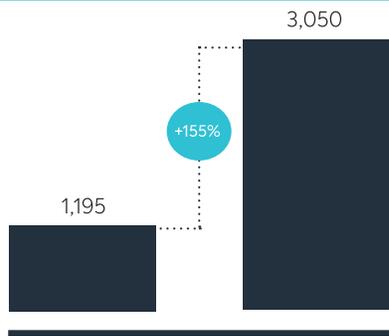
Despite little global progress in addressing the systemic challenges related to measurement, accountability, and flexibility, there have been a few cases of bold and innovative leadership. In this section, we've chosen to highlight four of these efforts, from Pakistan, Liberia, the Philippines, and South Africa, 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.

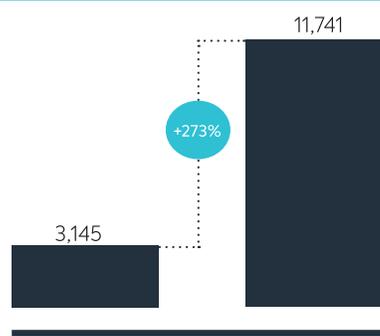
The reforms in Punjab demonstrate significant efforts to address the systemic challenges outlined previously. Private sector education has long been a feature of the education system in Punjab, with almost all the elite and upper middle class children attending a wide variety of private education options. 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.

Students in schools supported through public private partnership¹
'000s students



¹Student enrolled through PEF and PSSP

Schools supported through public private partnerships²
Schools



²Schools supported through PEF and PSSP

Figure 5:

From 2011-2017

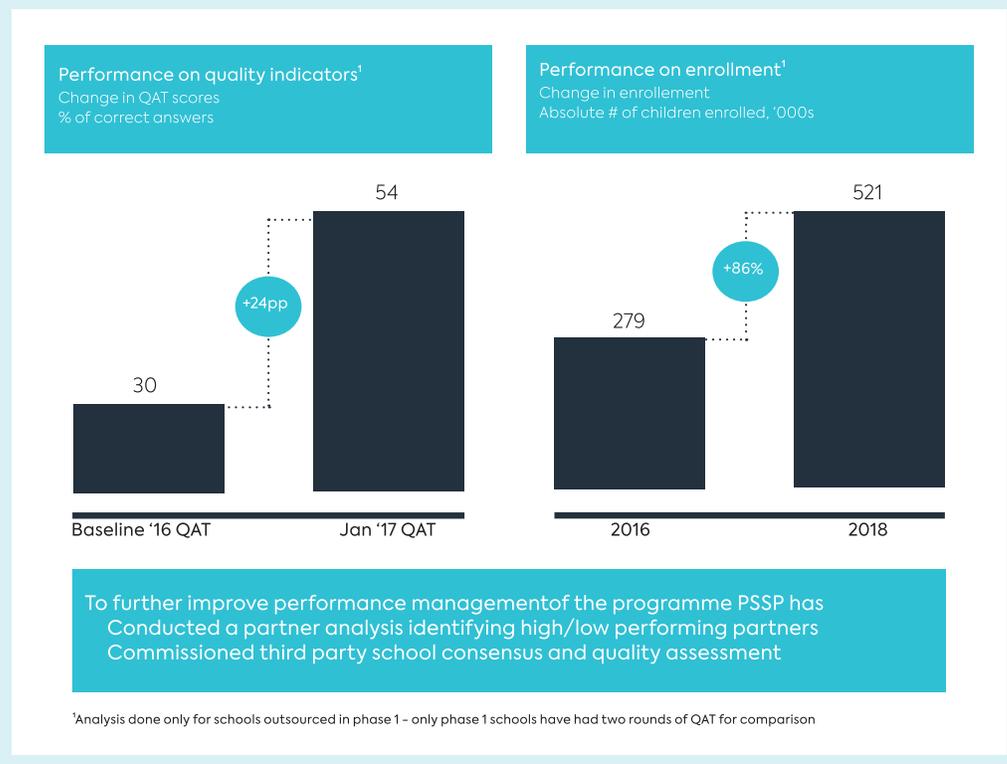
Punjab has seen an unprecedented in public private partnerships for education

How did they achieve this? The Punjab Education Foundation (PEF) was set up as a vehicle for formally providing public support to private education providers. PEF consists of three main programs and is governed by a board of directors that is composed of both government officials and private sector leaders. The PEF operates three programs, each with a unique structure: Foundation Assisted Schools (FAS), Exchange Voucher Service (EVS), and New School Program (NSP). FAS gives grants to cover the tuition for all students in select low-cost private schools, and encourages the schools to expand. Grants are given on a per-student basis. The EVS program gives vouchers to out-of-school and very poor children to attend existing private schools that have been vetted for quality by the PEF. The NSP provides guaranteed funding for ~2 years to entrepreneurs to set up new schools in areas with many out of school children where there are no other schools in existence within a 2 km radius. These efforts have gone a long way in increasing the flexibility within the system, allowing for families and operators to actively work towards innovative solutions.

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 6:
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

Phillipines

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:

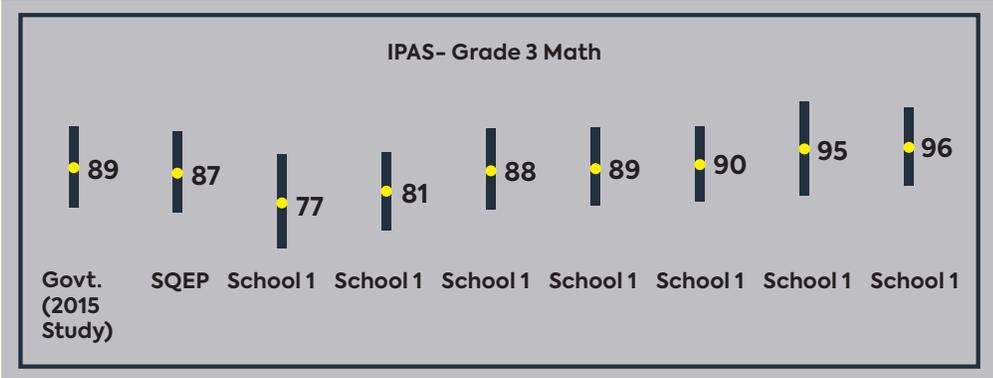


Figure 7: Baseline levels in the selected government schools were similar to the government average

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.

Section V: Where Do We Go from Here?

The case studies in Section IV provide reason for optimism – forward-thinking leaders have been able to find ways to combat the challenges of improving the quality of education by designing systems to promote flexibility and accountability with more rigorous outcomes measurement. In Section III, we described the issues emerging from recent decades of reforms because understanding the problems and their origins is essential if system leaders are to promote and implement more efficacious strategies. In this section, we combine theoretical models, evidence and case studies to examine new ways of thinking about organizing our education systems to foster student success.

In any sector of government, pragmatic stewards need to choose what role they will play in strategy, provision, regulation, and funding. The choices made in education have geared systems toward delivering more schooling, but with low and stagnant learning outcomes. The choices they need to make now must surely deliver both sustained learning gains and improved equity. Fortunately, we have seen examples of bold alternative choices that have been made in some educational systems around the world which have led to learning gains and equity improvements, several of which we highlighted in the preceding section. These choices are characterized by the following core themes:

Facilitating learning-driven schools

We described in Section III how traditional focus on input-driven public provision of schooling has contributed to low learning outcomes in education systems around the low-income world. An alternative structure can ease the headwinds that often undercut the accountability, innovation, and information flow required to deliver improved learning.

What would this alternative structure look like? Different systems have approached this question differently, depending on the extent to which the government chooses to be a direct provider, In all cases **five key actions underlie successful approaches:**

Enable a range of different innovative models to ‘join the cause’ by allowing for both public and private provision.

The extent to which private options are encouraged varies from 100% voucher programs (e.g., Chile, Netherlands) at one end of the spectrum to a mere tolerance for private endeavors on the other. In all these systems though, private options are able to thrive and innovate to attract students.

Learning innovations can also diffuse throughout education systems when private providers have room to innovate. Allowing a wider range of competent operators and investors to ‘join the cause,’ even if outside the public system, makes success more likely. Often in these debates a distinction is made between “for-profit” and “not-for-profit” providers. We think this is a distraction. Leaders who adopt pragmatic stewardship should surely judge providers on what they do and how they perform rather than their ownership structure.

Ensure all providers are held accountable to delivering learning and contributing to system equity.

There are three main ways systems can hold providers accountable for learning and equity. First, they can tie some resource allocation to learning and equity results. Second, for public schools, they can use effective line management to hold school leaders accountable, by basing hiring, firing, promotion, compensation, and other management decisions at least in part on successful learning and equity. Third, they can use regulation to reward and recognize or alternatively impose costs and penalties on schools depending on their success.





Effective systems should use all three of these mechanisms in a sophisticated way and do so based on reliable data on learning and equity, rather than input proxies. The extent to which they use each accountability tool varies depending on the model, as we will describe further at the end of this section. All mechanisms depend on reliable information on outcomes.

Help relevant providers improve their delivery through support tools. Building the capacity of actors in the system is as critical a system task as holding them accountable. Delivery plans can identify key areas where capacity building is required to achieve learning targets. For teachers, who can benefit significantly from greater support, targeted coaching and properly structured peer networking both show strong evidence of efficacy. All too often, the only training teachers or officials get is passive, lecture-based and ineffective.



Reliable information on outcomes should be easily accessible to increase system accountability and enable informed resource allocation and so that parents can make informed consumer decisions: One consistent finding from several studies of choice in schooling is that families can be extremely effective allies to system stewards in reporting abuses, verifying information, rewarding good performance with attendance and referrals, and penalizing poor performance through direct pressure and taking children elsewhere. For families to contribute as effectively as possible, they require access to reliable information about learning and equity (Read, 2017). Thus, in addition to ensuring their own access to reliable information, stewards should find ways to make simple, relevant information transparent and accessible to families.



Insofar as resource allocation rewards success in delivering outcomes, decisions should be based on reliably-obtained data: Bevan and Hood (2006) highlight that four basic ways a target could allegedly be delivered:

1. The provider met the target through effective delivery
2. The provider sacrificed important aspects of learning that were not targeted in order to meet the target
3. The provider ‘hit the target but missed the point,’ by taking actions that conflicted with the substantive goals behind the target
4. The provider gave false/distorted information that it met the target

Clearly, the benefits of funding following performance only accrue in the first of these four; in the other cases, rewarding reported performance can subvert the system’s strategy. We will discuss this issue in greater detail in Section VI, but for now, let us simply emphasize that funders must have access to reliable data on a variety of indicators about learning and equity. This is a core responsibility of effective pragmatic stewardship.

Moving the ecosystem of regulation toward learning

In defining the rules of the game by which learning is delivered, regulators shape what types of providers enter, grow, and exit the education ecosystem. In biological ecosystems, natural selection is the mechanism by which success is promoted over time. In effective education systems, learning and equity are promoted over time through regulation, funding, and direct management of providers. We discussed who can be a provider above and will discuss funding below. Of the three, regulation has the benefit of being the most direct mechanism if regulations are well-designed, refined sensibly over time and enforced firmly and fairly.

Regulation could clearly advance learning and equity by incentivizing delivery of these outcomes. Examples of effective regulations we have observed include:

- Allowing for broad-based entry of providers by limiting entry costs and requirements so that innovations can be introduced to the system - of course, this must be accompanied by necessary due diligence
- Providing for direct intervention from regulators where providers fail to deliver a basic level of learning
- Requiring transparent collection and publication of data about the school's performance
- Motivating providers to improve the equity of the system by providing greater rewards for enrolling and teaching disadvantaged segments of the student population

All of these are much more likely to drive improved outcomes than most current regulations, which focus all too often on inputs that have little relationship to delivering a high-quality education.

How these regulations are set out and enforced in practice depends on other features of the model. No matter what, regulators require access to reliable data and a mindset of creating conditions for the ecosystem – much like tending a garden - rather than controlling for each actor. This move from total control to pragmatic stewardship requires a mindset shift as well as a policy shift.

Three models for pragmatic stewards

Governments around the world vary dramatically in their engagement of the private sector as a solution to ensuring every child has access to a high-quality education. The iterations and permutations are endless, as is the potential to experiment with new models that allow for more innovation, flexibility and accountability. In this section, we will show the spectrum of potential options and discuss the evidence and experience with the various models. We will look at the considerations that public sector leaders should examine when designing their systems and ways to run experiments and start slowly to try to new approaches.

In Figure 6 below, we show six models on a broad spectrum from public-only on the left to private-only on the right. Any of the models might conceivably succeed in some circumstances. Rather, we will outline why the three models highlighted – consistent with the themes above – tend to do better at delivering improved learning at scale and what system leaders should consider when selecting which approach may be appropriate for their country or region. It is important to note that successful models often have elements of all three highlighted models, combining, mixing and changing over time through experimentation and circumstance.

Figure 8: Six internally consistent models available to system stewards

	Description	Education exampl	
Public ● ⋮	Maintain the status quo	Status quo: input-focused public provision with generally low and stagnant learning outcomes	Many low-income countries
● ⋮	Drive delivery	Mainly public provision with delivery/results focus, and space for private alternatives	Punjab, Pakistan (2011+)
● ⋮	Combine forces	PPPs: public schools contract private admins/ operators (can be school mgmt. or adoption)	Liberia PSL Punjab, Pakistan (2014+)
● ⋮	Unleash the citizens	Variable-rate voucher system with public and private providers	Philippines Senior High School – Education Service Contracting (ESC), Punjab Education Foundation – Exchange Voucher Program
● ⋮	Privatize provision	Vouchers with only private providers	Hong Kong kindergarten provision
● ⋮ Private	Privatize the whole system	Purely private marketplace, family pays not the government	Some tertiary education

Drive Delivery: Delivering improved learning through mostly public provision

In the Drive Delivery model, stewards start with their end goal to improve the quality of learning and work back to design and implement a strategy focused primarily on the public sector and public sector institutions. In this strategy, leaders remain outcome focused while monitoring the performance of the inputs and holding the system accountable for results. Core to making drive delivery work includes a detailed understanding of the chain of command and system of incentives from the center of government out to the end recipient, in this case the student and their parents. In Drive Delivery, the government primarily focuses on funding public provision but allows for private alternatives so that families can exercise choice. They regulate to promote ecosystem growth but more or less stay out of the way of the private sector.

Since 2011, the Chief Minister of Punjab in Pakistan has built out many elements of a Drive Delivery system. The Chief Minister set ambitious goals on enrolment, attendance, and learning outcomes and then focused his civil service around a simple, yet prescriptive roadmap that details the key actions necessary to meet the system goals. The Chief Minister also holds regular, bimonthly meetings with all his advisors and top officials present to review progress on actions and solve roadblocks. The top decisions makers in the province are present – the Chief Secretary, Secretary Finance, Education Minister, Education Secretary, the chair of the technology function – so when an issue comes up such as funds being released for new textbooks, the Chief Minister can turn to Secretary Finance and instruct him to get it done promptly.

In the next phase of reform, he shifted to the Combine Forces model, encouraging NGOs and private providers to join the system and take responsibility for building and running schools in rural areas. As described above Punjab also has a voucher scheme aimed specifically at poor families, now supporting over 300,000 students at registered private providers thus also Unleashing the Citizen. This shows how systems can coherently combine the paradigms we set out above and shift the emphasis between them over time.

As the examples of Punjab demonstrate, the Drive Delivery approach can often work well in situations where leaders recognize a change must occur but there are strong political pressures limiting public support for non-public providers. It is also often the best option when there are few non-public alternatives available for either contracting or public funding – often due to both supply (few providers have developed) and demand (few households can afford even low-cost private options) constraints. For this reason, some reformers, as in the Punjab case, view Drive Delivery as an important core competency of a more potent system, giving alternative providers space to grow as the public system gets its governance aligned around learning. This model is thus not only promising in its own right; it is also often a valuable precursor to or element of the other effective models.

Still, the Drive Delivery model has some key risks that prudent stewards should proactively mitigate as they build out the system. Two salient risks of this model include:

Risk of backsliding: Because the education delivery landscape changes less with this model, there is greater risk of backsliding to the status quo when leadership of the system wanes or changes. This can happen from mounting political pressures or the realization of the relentless nature of the work. Teachers will, often rightfully, object to greater accountability if they feel targets are unreasonable or they do not have sufficient support from the system to deliver against them, so pressures can quickly mount if the delivery effort is perceived as solely top-down and not managed and communicated effectively. Furthermore, stewards must have the persistence to lead the cultural and organizational change required to shift from an inputs-driven system with limited accountability to an outcomes-driven one with focus on data and execution. Especially with short political cycles, such efforts risk being reversed if they do not build a lasting supporting coalition from households up through key political influencers.





One strategy to get to irreversibility is to put delivery plans and data transparently online. Key public stakeholders can consequently come to align around plans and add their ownership. This source of public support then makes the initiative harder for opposition leaders or new ministers to reverse if they come into power. Training and embedding a culture of delivery in the administrative apparatus is another way to ensuring lasting change. Popular nomenclature has termed the need to make reforms “sustainable”. We believe that leaders should go a step further and build in elements of irreversibility.

Risk of adding output regulations without removing

input regulations: Several issues might arise as regulators shift focus from inputs to outputs.

First, if regulators add rules controlling outputs to the current system without reforming the existing regulations, it is likely the result will be additional costs and constraints to education entrepreneurs and further restrictions on innovation and ultimately supply. Instead, regulators should approach their task as one of removing most traditional regulations. Design the new system from the ground up based on first principles and adding new rules on an as-proven basis, to ensure solutions are grounded in evidence and not legacy concerns. For example, two seemingly benevolent rules in many countries that constrain formal alternatives are a) extensive teacher accreditation conditions and b) costly infrastructure requirements.

There are ways to relax these requirements without opening up the systems to predatory practices. Systems could require teachers meet certain basic requirements to protect students, while not mandating full accreditation (e.g., the adult must lack any criminal record and pass a basic test in the subject they teach). Furthermore, regulators can recognize that the title 'teacher' consists of several different roles, from mentor to content deliverer to facilitator to classroom manager, and many of these roles may require less formal qualifications than systems currently allow. Further, young teachers can also demonstrate that they are in progress towards receiving qualifications within a stated time-period.

For example, infrastructure, one basic change the Philippines recently made has significantly lowered costs of entry – providers can now rent facilities rather than having to own them. All facilities are inspected by the Department of Education before the school opens and the school management organization is subject to scrutiny to ensure it is focused on student learning. Simple changes like these can have a major impact in helping systems shift from input-driven constraints to output-driven ones. They also reduce the capital requirements and barriers to entry for new, potentially more innovative suppliers that might be more focused on teaching and learning rather than real estate development.

Second, some stewards cite that a main reason they constrain inputs and formal private entry is they fear unethical private operators may cheat families into paying for a poor-quality education before output data comes in to reveal the ruse. This risk, though, exists with or without regulations, and families have shown an ability to figure out where their children will learn best (increasingly outside the public system in many places) or at least succeed in the local context. Additionally, it's important to note that input controls will not prevent this concern. Rather than let this risk inhibit formal alternatives, systems should increase transparency of results data throughout the system to ensure all providers receiving public subsidy are subject to the same learning scrutiny from families and regulators.

Combine Forces: Harnessing greater operational expertise to improve provision

In the Combine Forces model, stewards operate their systems consistent with the Drive Delivery model and add additional tools to achieve results. Under this model, a government-funded school need not be led, managed or staffed by government. There are opportunities to strengthen the system and add in some innovation with robust partnerships and new providers.

In a recent report on public-private partnerships in education, the Central Square Foundation highlights that two types of partnerships are especially common. First, in a school adoption partnership, public leaders contract with a non-public (private or NGO) group to manage existing teachers in a government school. In this model, public leaders recognize that management capacity exists both in and outside the public sector. When the system's learning-focused strategy produces delivery plans that find a gap in current public management capacity to meet targets, contracting with outside school managers can be an effective option to build capacity in the system without starting from scratch and can always be an option to move quicker than the government system. It also provides leaders with an opportunity to turn around failing schools with greater innovation drawing on accumulated outside expertise.

Second, in a school management partnership, public leaders contract with a non-public group to run a government-funded school, hiring its own teachers and taking responsibility for every aspect of provision in the school. This model offers many of the benefits of the school adoption partnership and allows for greater levels of innovation, accountability, and expertise as operators have increased scope to change structures that have failed to deliver improved learning.

Elements of both models were at play for the case study on Liberia cited above. The minister decided that he wanted to bring in private school management organizations who could jumpstart the system quickly after years of dealing with the effects of the civil war and recent Ebola crisis. The PSL program offered something akin to school adoption, with operators taking over existing schools with existing teachers. At the same time, PSL recognized the need for greater autonomy for operators and offered input on school selection as well as the ability to replace teachers. They even had first choice of fresh graduates joining the teaching force, resembling more closely a school management partnership.

In the case of PSL and other places where we have begun to see Combine Forces models emerging, we find conditions in the education system are sometimes more conducive to continuing reform than in a pure Drive Delivery context. Combine Forces partnerships can be especially valuable when systems have underutilized public infrastructure, and an ecosystem of capable non-private operators with operations capacity but limited capital or flexibility to build out their own provision structures. Furthermore, such partnerships can be a way for stewards to choose the extent of innovation and change to bring to various schools in a way that is responsive to differing teaching conditions, political pressures, and local conditions across their system.

Unsurprisingly given how similar they are, Combine Forces models face many of the same risks as Drive Delivery models. Two salient risks of this model include:



Risk of poor partner selection:

Contracting with partners can be a valuable way to increase efficiency, but stories of contracting poorly are about as common as of doing so well. This does not mean stewards should simply throw up their hands and avoid such models, but it does mean they must be thorough and systematic in preparing, monitoring, and executing partnerships. Government capacity must be developed to ensure that some crucial steps are taken during the process. For partner selection, public leaders must be clear in their objectives for the partnership and perform due diligence on potential partners to ensure they are willing and able to deliver against public objectives. Also critical is an open and transparent selection process with clear evaluation criteria open to the broader public. This step ensures that every partner is treated equally and the best providers make it through. These agreements have historically proven hard to exit, so getting it right from the start is essential.

Liberia’s education minister learned this lesson firsthand as the program initially launched with a single operator, Bridge International Academies². After significant backlash from the international community, a more open process was created through the Partnership Schools for Liberia that brought in other operators. Even still, Bridge International operated by a different set of rules that created challenges in terms of measuring the program in the first year.



² Omidyar Network, who helped fund this paper, is an investor in Bridge International Academies

Risk of ineffective partner contracting and enforcement:

Even if partners are initially willing and able to deliver against objectives, contracts must be well structured to ensure that potential becomes reality.

Contracts should be clear and enforceable, with targets tied to the system's strategy and providers subject to the same outcome-based requirements that purely public providers are; in other words, a level playing field. The targets must also be realistic given local operating constraints.

Furthermore, contracts and enforcement should ensure not only that partners hold up their end but that the public leaders do as well. In particular, leaders must a) ensure contracts provide partners enough scope for innovation, autonomy, and performance-driven rewards so they are attracted to the opportunity and are able to make necessary changes to accountability and incentives to improve learning; b) provide prompt payment to partners in accordance with agreed terms, so that partners can operate against predictable resource flows; c) build in clear efficacy requirements and regular reporting and d) maintain continuous dialogue between the government and the providers. Where these conditions have not been met, good non-public operators will have little incentive to participate, making the Combine Forces model ineffective.

Unleash the Citizens: Summoning effective provision across the ecosystem

In the Unleash the Citizens model, stewards are even more expansive in developing the core themes of a learning-driven system. Here, the strategy and regulatory elements are largely consistent with the above models, but funding follows students to different types of providers, and not just to public providers. Thus, any actor – public, NGO, or private – that is willing and able to provide better learning opportunities for students is brought in to 'unleash the citizens' by giving them choice. Citizens can thus collectively tackle the enormous challenge of improving learning throughout the system by creating more viable and direct upward pressure on the system.

The debate over school choice and voucher systems is contentious in some places, and evidence on the efficacy of voucher-based systems is mixed. While we do not advocate for a voucher-based system as a panacea for all system stewards, we do see tremendous potential for systems, especially in low-income countries, to empower people to seek non-public school options that deliver improved learning at lower cost. If equity is a priority, the vouchers can be targeted at poorer families, as in Punjab, Pakistan. The big shift here is to accept that many parents have voted with their feet (and even more may have the desire) – and the role of government is to ensure every student, wherever they go to school, gets a good education.

This model has been employed meaningfully in the Philippines case study highlighted earlier. The vouchers have allowed the system to cost-effectively reach students as they expanded from a K-10 to a K-12 system by leveraging the capacity and flexibility within the private sector. This has meant that students and families have a direct say in where they attend school, focusing the accountability of providers in providing meaningful opportunities for university entrance or employment to attract senior high school students.

The Unleash the Citizens model appears particularly well-suited to addressing the conditions prevailing in many low-income countries today. First, when constraints to public provision of improved learning are especially pressing (e.g. costs are high, teacher accountability is low, and reforming providers is difficult), marshaling alternative providers to the cause introduces greater innovation and accountability while enhancing cost effectiveness. Second, when a base of relatively capable private/NGO providers and entrepreneurs exists in the country, families are more likely to benefit from choice, and choice-based funding is more likely to drive system improvement. Third, a country's political, administrative, and social environment is a key determinant in the potential for the model's success, as family choice must be relatively well informed, and public resources must flow reliably to the providers those families choose.

Like all the models, there are serious risks that must be mitigated in efforts to Unleash the Citizens. There are two salient risks that stand out with this model:

Risk of poor data transparency: As the vouchers unleash citizens to choose the schools of their choice, they must be armed by transparent, meaningful, real-time data on school performance. As we've mentioned throughout this paper, this can't be input-related data, but rather data pertaining to the learning outcomes for students. Without a robust data system in place, this lack of transparency can lead to distorted effects in the system. Instead of competing on the provision of quality learning, providers may instead compete on proxy variables that are weakly correlated, such as facilities or better marketing. Therefore, it is incumbent upon any stewards looking to implement a voucher scheme that this decision is preceded by a determined focus on measurement.

Risk of corruption: Any time there is significant money deployed directly through the choice of citizens, there are significant risks for corruption. Poor actors might try and manipulate the system to take advantage of opportunities for voucher payments, and the public system must be designed carefully to minimize these opportunities and address them quickly and severely if they occur



Choosing the right model for the system

Based on the evidence from both successful and failing learning systems throughout the world, we believe founding the system's strategy, provision, regulation, and funding on one of these models will give stewards the greatest likelihood of transforming learning outcomes in their countries with the limited resources at their disposal. Each of these models comes with its own contextual success factors and risks that must be mitigated. We do not intend here to advocate that any one of these models be implemented across the world. Rather, we recognize that developmental and cultural conditions in a given system make some versions or combinations of these models more conducive to improved learning than others.

No matter what model a steward chooses, all successful systems must have strong leadership and a reliable data and monitoring system.

No matter what model a steward chooses, all successful systems must have strong leadership and a reliable data and monitoring system. Without effective data, education leaders are operating in the dark, aimlessly throwing around solutions without ever knowing if they are on track to succeed or if they ever reach success. Measuring progression in education, particularly focused on learning outcome and impact, is incredibly difficult. No government on the planet has a perfect or complete system, but that is no reason to not invest in the basic building blocks.

Without effective data, education leaders are operating in the dark, aimlessly throwing around solutions without ever knowing if they are on track to succeed or if they ever reach success.

Ideally, education systems would systematically measure learning outcomes on a monthly basis for system management and feedback mechanism for teacher development. Accountability of the systems needs to be more nuanced and carefully considered based on what the system needs to achieve on each level. There are issues with interoperability of data, unevenness of collection and agreement on what should be assessed and when. Efficacy is hardest to measure and manage in large, sprawling systems that are managing low income students often in rural or tribal settings. Where government systems and services are weak, data and monitoring systems are often similarly least developed. However, as we have seen, particularly in Khyber Pakhtunkhwa, Pakistan, that developed a measurement system, making strides on data collection is possible even in the most remote and desolate settings.

We advocate that stewards use data and constant refinement to tailor an effective model to their system's circumstances and opportunities. As we have illustrated above, we believe that the models or elements highlighted can be combined in practice. Standing still is not an option. It's a grave mistake when governments persist in pursuing an approach which is evidently failing to produce results. There is a strong need and drive for pragmatism— it is commendable for a system to chooses any of these models and delivers outcomes.

At an education reform meeting in Punjab in November 2014, there was a debate about the role of the private sector in education. At the end of the dialogue, after the every official and adviser had weighed in, the Chief Minister summed up, “How can we be such a demanding regulator (of the private sector) when we don’t have our own house in order?” In effect, these models allow parents to help be the regulator of the system through their choices as the government improves its own capabilities of delivering services effectively. It’s also a wise remark from government to realize their own limitations and to hold the various elements of the system to the same standard regardless of the operator behind the provision.

As stewards make these decisions and begin executing their strategy, they must be aware not only of model-specific risks but also several common challenges to implementation that large-scale system changes like this will encounter. A common lesson from successes and failures is that model design is necessary but not nearly sufficient to delivering system-wide impact – it is the details that are so critical to successful reform. In the next section, we highlight additional key conditions that stewards need in place to ensure the foundations are in place for effective implementation.

Section VI: Getting Implementation Right

Unfortunately, in public sector reform, particularly education, policy change and goal setting is just the beginning of the challenge. To achieve results for students across the system, the vast share of focus and resources will need to be on relentless and systematic implementation. There are significant vested interests at stake in input delivery, making the shift to pragmatic stewardship will take time and careful attention. A leader must be prepared for set-backs, dips in performance, and periods of public criticism along the way. Keeping the long-term goal as the north star and building every day in the right direction is critical. Relying on the key principles is essential. Stewards can use the key principles as building blocks, and effective implementation as the mortar that holds them together robustly.

While leaders will find many types of implementation challenges they will need to address to succeed in their specific context, we have 9 recommendations stewards should seek to incorporate in their reform program to take their education system beyond the mirage:

1. **Bold and sustained leadership**
2. **Accountable and continuous delivery**
3. **Well-enforced regulations to align incentives**
4. **Transparent measuring and data flow**
5. **Long-term mindset**
6. **Maintain flexibility for innovation and experimentation**
7. **Infuse the system with a culture of integrity, performance, and drive for results**
8. **Focus on end learning outcome results**
9. **A guiding coalition and ever widening circles of leadership to see the reform through**



Bold and sustained leadership

Stewards have three extremely challenging roles in moving their systems beyond the mirage. First, they must create an impetus for change and draw others into a shared vision emphasizing the moral purpose. This is above all a communications challenge. Second, they must oversee the process of setting up reforms and authorizing the structures and strategies to deliver them. Third, they must hold officials in their system accountable to delivering improvements, while also obtaining feedback from the ground and distinguishing between vested interests in the existing system that should be overcome and legitimate contextual lessons that should inform iterations to the plan.

These roles require courage, authority, commitment, discipline, tact, and incredible persistence. The Chief Minister of Punjab, Pakistan – Shahbaz Sharif– has provided a telling demonstration of these traits during his leadership of education transformation in his province. In 2010 after a series of natural disasters culminating in massive floods, the Chief Minister could have given up on systematic reform. Instead he took on the problem. The reforms were driven by a simple but bold plan to set targets, improve teaching quality, strengthen district effectiveness, increase enrolment and provide basic facilities in every school. It was called the Chief Minister’s Schools Reform Roadmap. It did not take long to design; the challenge was always in implementation. When the roadmap started there were many in the Education department and broader civil service that were skeptical, they wondered if this would just be one of the many failed reforms in Pakistan. As it turned out, these skeptics became the most ardent supporters of the Roadmap as it began to deliver significant improvements.

The example from Punjab, is also one in persistence. By the time this is essay will be published the Roadmap will be in its 8th year of implementation. The sustained momentum has overcome countless ups and downs. The strategy has evolved to include more and more private sector innovations after the initial success of drive delivery and the strengthening of the capacity of the education system.

Accountable and continuous delivery

In each of the three pragmatic stewardship models described in Section IV, the overall work burden of the public sector does not change. The civil service does not play any less of a role in ensuring high-quality education is delivered to all its citizens. What changes is the nature of the role. Education departments and ministries must set strategy and then deliver results through regulation, provision, and funding against that strategy, at each step engaging with and delivering through actors across the education landscape.

When public leaders do not hold officials or contracted providers accountable to delivering effectively the basic building blocks of the system, there is a risk of crisis and failure. We highlighted several of the key risks in the previous section, such as in the cases of delayed funding for non-public partners, the use of delivery plans to enforce targets without changing the structures that led to poor performance in the first place, or local officials' incentives to solicit side payments from providers that do not meet outcomes.

In order to avoid barriers to accountable delivery, stewards must ensure that their approach to delivery sets officials up for success and then provides consequences and rewards based on the results. Officials need to have clear expectations of their roles, and the necessary training and capacity to meet high expectations.

In practice, we have observed instances in which systems stumble in setting officials up to deliver, with the consequence that they are unable to hold officials accountable credibly.

Well-enforced regulations to align incentives

In discussing the Unleash the Citizens model, we highlighted ways that providers can face distorted incentives if the approach is not carefully designed and executed. This theme pervades all pragmatic stewardship models, as learning outcomes derive both from factors within the schooling provision and external factors that providers can influence e.g., through student selection, extra resourcing, etc. The Liberia PSL case study showed an uneven distribution of financial inputs deployed by various providers.

Systems can mitigate the potential for distortion through several action principles:

- Ensuring good, timely, broadly accurate data is checked against other data sources regularly; similarly unexpected blips or unusual patterns should be investigated.
- Basing targets, regulation, and funding on a broad set of ‘thick accountability’ measures that include absolute assessment scores, score gains relative to expected gains (based on starting level and other observable student and household characteristics), additional performance measures, and other priorities like equity characteristics.
- Putting system in place to learn and course-correct, as the education system evolves over time.

Even with these principles in place, though, providers may not respond adequately to incentives if complementary principles are not enforced, namely:

- Providers must have sufficient autonomy to attempt new and different methods to achieve higher learning levels. This includes flexibility regarding input decisions such as the use of technology and classroom space the appointment of teachers as well as their accreditation and performance measurement. When such flexibility is lacking, innovative providers may choose to avoid the incentive system entirely and thus the most disadvantaged students miss out.
- Providers must experience the direct and speedy linkage between outcomes and rewards/consequences. It does not matter how well the reward system is designed on paper, if the rewards and consequences are not enforced in a timely manner they will not be effective. One implication of this is that public and private schools that do not meet outcomes thresholds must face punitive consequences that most systems are unused to applying. Stewards must ensure reformed systems are well positioned to enforce such consequences in a timely and efficient manner.

This combination of autonomy and accountability sounds obvious, but the reality on the ground is that most systems implement neither autonomy nor accountability. Even in Punjab, it's rare for private providers to be removed of their charter based on performance. In PSL the school standards still have strict criteria to follow from the government. Rules and policing by the government will not work in a vacuum. The human element of the operators in the system is important and there needs to be a positive culture of integrity and mission among the providers, public or private. The power of intention, while difficult to measure, can make a difference.

Transparent measuring and data flow

The necessity of robust data and measurement systems has been a critical point of emphasis through this essay and its importance cannot be over stated. Without proper measurement and data systems reform is doomed to fail. Actors at all levels of the system have to be able to assess where they are on the path to successfully delivering learning outcomes and be able to measure if what they are doing is improving their ability to be successful.

We recognize that implementing a strong data and information system is difficult and an on-going challenge. We list a few ways we've seen systems be successful to address gaps in the past.

To address issues of false/distorted information, systems must:

- ***Ensure assessment tools are accurate and reliable.*** The act of eliciting learning data through assessments for all providers is full of logistical and strategic challenges, but it is central to a system of pragmatic stewardship. Many low-income-country systems provide unbiased, annual assessments for all public schools, so we know such data collection, while daunting, is possible. One often-necessary practice is auditing the assessment process to ensure, among other things, that tests are filled out by the students to whom they are targeted. Another helpful practice is using technology to facilitate implementation and constrain ex post tampering of results.

- ***Ensure that all students take the assessments.*** Currently, some providers will force students who are not expected to perform well to ‘drop out’ before high-stakes tests such as the 10th grade national exams in India. As a result, the schools appear to perform better than they would if all students took the exams. To address such issues, regulators should perform audits of schools and impose requirements that assessment registers reflect enrolment registers. The general lesson is that more than one data set is necessary so that the results can be “triangulated” and evidence of distortion identified.
- ***Incentivize honest information flow from providers.*** As with most incentives, stewards can use both carrots and sticks to incentivize providers to supply reliable data. Sticks can include severe penalties when dishonest information is discovered (plus implementation practices that raise the likelihood of such discovery). Carrots can include, for example, greater trust if a provider has never been caught providing dishonest information. Systems can become substantially more effective by treating local communities as valued partners in both providing and receiving information.

Parents and communities can report information to public systems to help identify mismatches between reported results and the realities of provision. For example, officials can hold community meetings to elicit information, or they can set up mobile-phone-based systems for families to report issues they observe. In Punjab, for instance, the education ministry has a central call center that fields anonymous complaints on exams operated poorly. In Khyber Pakhtunkhwa, Pakistan, a free phone hotline has been established so that incidents of physical punishment can be reported and investigated.

Communities can help enforce the accountability of providers by using public information to choose where they enroll their children and to discuss issues directly with administrators and teachers at their children's schools. For communities to be effective in this role, they should have access to basic information about performance and be equipped with an understanding of how to respond. There is increasingly data available in a visible way for parents and students to make decisions. Another tool that systems can employ is a new type of civil servant (or NGO partner): a choice counselor. These counselors could be employed to help parents understand information about various providers and their options in responding to that information. As with all of the system roles, choice counselors would need to be held accountable for honest and informed behavior; such behavior might be more likely if counselors come from the local communities they serve.

Long-term mindset

Education reform, regardless of where it sits on the spectrum, is an endless endeavor. Targets and goals are set with enough line of sight to be achievable but the fundamental task of ensuring performance never ends. Education system stewards must take action and expect results on a timeframe that will likely extend past their time in office. Additionally, learning improvement is not a linear function, it may look more like a step change that happens over a period of years not a smooth linear curve. This may be frustrating to the public, researchers and parents but should not deter system stewards from measuring what matters and taking an iterative and innovative approach to improving their education systems.

Maintain flexibility and space for innovation and experimentation

We live in a rapidly changing world. Many of the jobs that children today will likely fill have not been created yet. While technology has changed the world, many school systems have stagnated, using old methods of teaching and learning, standard models of school day set up and dated means of assessment of learning and outcomes. Every school system today risk catastrophe without building in room and space for flexibility and innovation. The risk of doing nothing and not trying something new is much greater than the risk of many of the innovations which are used and piloted elsewhere. System stewards know that the way innovation is made culturally contextual and integrated into their system makes all the difference. Systems that are open to new ways of operating and allow themselves to be pushed and challenged from within will flourish. Those that don't will always be limited by their past and will be unable to move quickly or overcome adequacy.

Infuse the system with a culture of integrity and performance

Rules and oversight from the government will only go so far to improve an education systems. Leaders who wish to see beyond the mirage will recognize that the values of the leaders across the sector from the public civil servants to private school operators will make a large difference in the outcome of any reform effort. Ensuring the system, particularly those with innovative public-private schemes, demands integrity and performance toward the goal of improving learning outcomes

Focus on learning outcome results

Pragmatic stewards need to have be clearly focused on the most important result, the end outcomes for students to be successful contributors to the economy and support their own livelihood. These results need to be the clear guiding force that directs action and communicates the importance and urgency to all the relevant actors in the system.

Build and sustain a guiding coalition to the cause

Like any major reform, any leader taking a system beyond the mirage is likely to face resistance as actors with a stake in maintaining the status quo dig in their heels to prevent change. Among all the critical implementation steps, navigating a sea of stakeholders to build and lead a guiding coalition is perhaps the steward's most vital role. To do so, stewards must consider how to engage with many affected parties and bring them along to support the vision and end outcome: that all children have access to a high-quality education. Below we have detailed some of the most important actors that should be part of the guiding coalition.



A small leadership team at the center: No leader, however effective, can deliver without a small, talented, committed team that stays in place for a sustained period. Too often, simple turnover of officials prevents success.



Public teachers and administrators: Teachers and administrators will be among the most affected by reforms, and will influence which of the pragmatic stewardship models the system selects. As much as possible, leaders should aim to get major teacher groups on board with reforms, by clearly communicating the current crises in learning and ensuring that improvements in support accompany improvements in accountability. In addition, stewards should build a powerful coalition of other relevant actors to help teacher groups realize that joining and contributing to an effort with momentum will be more promising than opposing it. Often, those who initially oppose a reform will come on board once they realize the reform is going to happen. This is especially true if the reform has evident momentum and it delivers some quick wins.

Local officials: It is important that stewards provide space for officials to understand the new logic of pragmatic stewardship and are not simply following orders. It is also essential to state the obvious – that officials are appointed on merit. One way leaders might facilitate this process is developing and refining delivery plans in close coordination with the local-level officials who will implement many of the steps. Another strategy leaders might take is framing roles and incentives in the reformed system to reward meeting and exceeding new expectations (both in terms of achieving tasks and providing useful feedback). Finally, when successful activities begin with small groups, leaders can identify ‘pioneering’ officials within their ranks that are willing to take up such tasks. They can openly reward such pioneering, and then also use their efforts to diffuse activities more broadly throughout the organization. These tools have been successfully employed in public reforms in Pakistan, Malaysia, Tanzania, and Burkina Faso, among others. Also regularly updated training based on the work of these pioneers can accelerate progress.

Private providers: Private providers will play an active role in any pragmatic stewardship system, either as partners with the public systems or operating complementarily along with them. These providers will only invest, if they believe that the reform is credible, and that the investments they make in innovation and growth will not run into unpredictable obstacles or political resistance. To begin this process, stewards can commit to transparently and consistent regulation of the system and engage with private operators, backing up their commitment with demonstrated proof points. If they find insufficient response from private providers to join the cause stewards can also consider incentives and support to make entry more attractive.





NGOs: NGOs can play several vital roles in these models, including as providers, as suppliers of key services for schools and communities (e.g. as third-party assessors, choice counselors, or information gatherers/disseminators), and as conveners of other stakeholders to foster communication and learning. In many settings, NGOs are among the effective non-public education providers in an ecosystem, as BRAC has demonstrated in Asia. Stewards should thus engage NGOs in their efforts both as private providers and as service suppliers.



Donors and multilateral agencies: Agencies like the World Bank, UNESCO, USAID, DFID, and many others have worked with low-income country stewards for decades to help them improve their education systems. As such, they have contributed both to the extraordinary gains in access and to the current poor state of learning outcomes. In recent years, many of these agencies have begun responding to the overwhelming data on low learning outcomes by seeking to refine their approaches and urge greater focus on schooling quality as opposed to just quantity. We know the sustainable development goals (SDGs) include learning targets. Still, these agencies can do more to provide specific, actionable support and outcomes-focused resources to governments and non-government actors (including other providers) in preparing to meet such targets. Additionally, they can push leaders to be more ambitious and set high expectations for results. We hope the work described here helps inform donor support and advice. From the stewards' end, they should confidently set out their strategy and urge agencies to marshal resources and expertise to back it. They should urge that donors' actions match their rhetoric.



Researchers, experts, and pioneers: While we observe several examples of elements of pragmatic stewardship systems across the world, this is ultimately an approach that requires learning and refinement at every stage as it is applied. As was the case for promoting enrolment (e.g., through conditional cash transfers), low-income country stewards can learn from previous efforts as well as lessons on how to approach implementation in their specific circumstances. Researchers and sector experts can contribute much to this effort by augmenting the current understanding of how to improve learning outcomes and diffusing that understanding throughout stewardship networks. In addition, pioneers at the forefront of improving learning can test innovations and disseminate successes and failures to inform successive phases of reform. Stewards should engage closely with these communities of learners, so that advances across the globe inform their own reforms.

A final note on implementation: addressing lingering areas of concern

We know that stewards and other stakeholders have several concerns about moving from the status quo to pragmatic stewardship. Even when they accept that changes must be made – that the low levels of learning in their education systems cannot continue – they look at alternative systems and point to specific areas of concern. Sometimes these reservations are ideological; sometimes they are based on data.

For the ideological concerns, we reiterate that learners across the world deserve a renewed focus on evidence-informed education systems. In arriving at our conclusions on how to move beyond the mirage, we have sought to ground all our assertions in data from existing systems, from relevant research, and from emerging models with early evidence of success. We do not claim the evidence for each detail is always overwhelming, and point out when evidence is mixed. Accordingly, we do not advocate that each detail be implemented in full from the outset, without refinement and discretion. But rather to observe what works best for a specific system. More than anything, the system we advocate here is simply one that uses evidence instead of ideology, wherever that evidence points. We believe it points toward the models described here, but if future evidence contradicts this, we will follow the evidence and we hope stewards will too. The key is to not be paralyzed by fear, and to weigh carefully the risk of doing nothing to a failed system.

What if the structure of strategy, provision, regulation, and funding is not the root problem? What if it's some other issue?

One advantage to the pragmatic stewardship approach is it allows for constant feedback and refinements or adaptation within the stewardship system those responsible have a clear direction and good real-time data revealing whether or not progress is being made. If stewards' strategies uncover a shortage of quality teachers as a binding constraint to learning improvement, they can take steps to address this constraint. In fact, they will have more tools to address such constraints, as they can utilize several different provision, regulation, and funding approaches to do so. For example, stewards aiming to increase the supply of quality teachers can train more teachers, incentivize entry of providers that source and train their own quality teachers, and hold more quality teachers accountable to being present and teaching through parental choice, competition, regulation, and better delivery management.

How do we ensure dishonest private providers won't just keep creating schools for a few years until they're shut down, taking people's money then moving on?

We have heard this objection a number of times before, and we should begin by pointing out that there is very limited evidence of such dishonest activity occurring in systems that allow for relatively open entry of providers. Even so, we realize it is a reservation that stewards have in opening up their systems to broader entry. We note two considerations. First, systems can take steps to mitigate this risk by maintaining information systems that track dishonest or low-performing private operators and limit their opening schools after the first discovered case. Second, systems in many ways are more vulnerable to this occurrence in the current unreformed status quo, as private providers operate in the shadows, and public systems lack reliable outcomes data through which to identify egregious actors. Open entry may result in a few more low-performing schools initially, but it will also result in more high performers, quicker and more binding accountability for low performers, and pathways for families to move proactively from low to high performers.

In most countries with strong education systems, improved public provision seems to have driven education improvement. Why is there so much emphasis here on private providers?

Some education leaders we have worked with point to countries with high PISA scores like Finland, Korea, and China and argue that public providers account for the vast majority of provision in these systems. Why should they structure systems that allow for greater levels of non-public provision? First, we find many of these cases misused as examples of public provision. Several East Asian countries like China and Korea, for example, have very large private tutoring sectors outside of school that account for a significant part of students' learning. Second, conditions in many low-income countries today are very different from conditions in these other countries when they underwent significant system improvements in the past.

The reliability of public service provision in general is often lower, public resources are scarcer, low-cost private options are more viable in a variety of sectors from healthcare to education to energy, and the initial levels of student learning and learning focus are often lower. Third, the treatment of private provision we describe in the three models actually is the treatment that most effective systems around the world use, with at least a systematic tolerance of private options and sometimes a much greater contribution.

Moving beyond specific concerns, we recognize that evidence-based concerns will continue to surface as stewards across the world seek to transition beyond the mirage. The best way systems can address such concerns is to constantly elicit them – through feedback from communities, providers, officials, and observers – and take steps to proactively address them. To do so, stewards should build a constant cycle of informed testing, evaluating, learning, and refinement into their reformed systems.

Section VII: Leaving the Mirage Behind

The Education Minister realizes that time is not for wasting. He needs change fast – there are millions of children in his country who need to be spending time learning and he is committed to the goal. He fears the political consequences – will the teacher unions outvote my party? Will my administration be mired in controversy? These are tough and complicated questions. Emma Watson, facing a similar potentially controversial role, quoted the Jewish aphorism said by Hillel in front of the United Nations General Assembly– “If not me, who? If not now, when?” When the Minister asks himself those questions there is only one conclusion: The time is now and I’m the one.

What the world needs most of all is bold leaders who act as agents of change and view themselves as stewards of a system. There were people who came before and there will be leaders who come after – but now, in this very moment, is the time for leaders who can act pragmatically to set the momentum for an irreversible system transformation. No one said it would be easy.

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References

(2019). Retrieved from <https://www.education-inequalities.org/>.

2013 DATA Report: Financing the Fight for Africa's Transformation (pp. 1–86, Rep.). (2013). ONE.

Acasus. (n.d.). Retrieved from <https://www.acasus.com/>

Altinok, Nadir; Angrist, Noam; Patrinos, Harry Anthony. 2018. Global data set on education quality (1965–2015) (English). Policy Research working paper; no. WPS 8314. Washington, D.C. : World Bank Group. <http://documents.worldbank.org/curated/en/706141516721172989/Global-data-set-on-education-quality-1965-2015>

Annual Status of Education Report. (2013). Retrieved from <http://www.asercentre.org/p/289.html>

Article citations More>> Bevan, G. and Hood, C. (2006) What's Measured Is What Matters: Targets and Gaming in the English Public Health Care, System. *Public Administration*, 84, 517–538. <http://dx.doi.org/10.1111/j.1467-9299.2006.00600>

ASER Centre. (n.d.). Retrieved from <https://www.asercentre.org/>

Banerjee, A. V., & Duflo, E. (2011). *Poor economics: A radical rethinking of the way to fight global poverty*. PublicAffairs.

Barber, M. (2016). *How to run a government: So that citizens benefit and taxpayers don't go crazy*. Penguin Books.

Barber, M., Kihn, P., & Moffit, A. (2011). *Deliverology 101: A field guide for educational leaders*. Corwin Press.

Barrera-Osorio, F., Guaqueta, J., & Patrinos, H. A. (n.d.). The Role and Impact of Public Private Partnerships in Education. *Public Private Partnerships in Education*. doi:10.4337/9780857930699.00019

Bennell, P. (2004). *Teacher Motivation and Incentives in sub-Saharan Africa and Asia* (Rep.). Knowledge and Skills for Development, Brighton.

Chaudhury, N., Hammer, J., Kremer, M., Muralidharan, K., & Rogers, F. H. (2006). Missing in Action: Teacher and Health Worker Absence in Developing Countries. *Journal of Economic Perspectives*, 20(1), 91–116. doi:10.1257/089533006776526058

- Day Ashley L, Mcloughlin C, Aslam M, Engel J, Wales J, RawalS, Batley R, Kingdon G, Nicolai S, Rose P (2014) The role and impact of private schools in developing countries: a rigorous review of the evidence. Final report. Education Rigorous Literature Review. Department for International Development
- Dixon, P., Humble, S., & Counihan, C. (2015). *Handbook of international development and education*. Edward Elgar Publishing.
- Dixon, Pauline and Tooley, James, (2005), The Regulation of Private Schools Serving Low-Income Families in Andhra Pradesh, India, *The Review of Austrian Economics*, 18, issue 1, p. 29-54.
- Engaging the Private Sector in Education: Lagos, Nigeria* (SABER Country Report). (2014). Retrieved http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting_doc/CountryReports/EPS/Lagos_Nigeria_SABER_EPS_July_2017.pdf
- Fielden, J., & LaRocque, N. (2008). *The Evolving Regulatory Context for Private Education in Emerging Economies* (Discussion Paper). International Finance Corporation.
- Gray Matters India. (2014). Retrieved from <https://www.graymatters.in/>
- Härmä, J. (2013). Access or quality? Why do families living in slums choose low-cost private schools in Lagos, Nigeria? *Oxford Review of Education*, 39(4), 548-566. doi:10.1080/03054985.2013.825984
- Kingdon, G. G., & Pal, S. (2013). Can the Private Sector Deliver Education for All? Evidence from Indian Districts. *SSRN Electronic Journal*. doi:10.2139/ssrn.2327001
- Kremer, M., Brannen, C., & Glennerster, R. (2013). The Challenge of Education and Learning in the Developing World. *Science*, 340(6130), 297-300. doi:10.1126/science.1235350
- Learning Metrics Task Force. (2018, February 26). Retrieved from <https://www.brookings.edu/product/learning-metrics-task-force/>
- Learning: To realize education's promise* (Rep.). (2018). World Bank Group.
- Mohammed, S., Ph.D. (2018, September 6). Tech or no tech, effective learning is all about teaching [Web log post]. Retrieved from <https://www.brookings.edu/blog/brown-center-chalkboard/2018/09/06/tech-or-no-tech-effective-learning-is-all-about-teaching/>

- Pakistan's lessons in school reform. (2018, January 4). *The Economist*.
- Pal S, Kingdon G. Can private school growth foster universal literacy? Panel evidence from Indian districts. 2010. Bonn: Institute for the Study of Labor (IZA).
- Patrinos, H. A., Velez, E., & Wang, C. Y. (2017, April). A Framework for Education Systems Reform and Planning for Quality. *Journal of Educational Planning and Administration*, XXXI, no 2, 93-113. Retrieved from <https://harrypatrinos.files.wordpress.com/2017/12/framework-for-education-systems-reform-and-planning-for-quality.pdf>
- Patrinos, Harry Anthony; Angrist, Noam. 2018. Global Dataset on Education Quality : A Review and Update (2000–2017) (English). Policy Research working paper; no. WPS 8592. Washington, D.C. : World Bank Group. <http://documents.worldbank.org/curated/en/390321538076747773/Global-Dataset-on-Education-Quality-A-Review-and-Update-2000-2017>
- Philippines: Senior High School Support Program – Project Brief* (Publication). (2016). Asian Development Bank.
- Pritchett, L. (2013). *The rebirth of education: Schooling ain't learning*. Center for Global Development.
- PUNJAB EDUCATION FOUNDATION. (2019). Retrieved from <http://www.pef.edu.pk/>
- Punjab Programme Monitoring & Implementation Unit*. (2019). Retrieved from https://open.punjab.gov.pk/schools/home/monthly_indicators.
- Read, L., & Atinc, T. M. (2017, January 25). *Information for accountability: Transparency and citizen engagement for improved service delivery in education systems* (Rep.). Retrieved <https://www.brookings.edu/research/information-for-accountability-transparency-and-citizen-engagement-for-improved-service-delivery-in-education-systems/>
- Romero, M., Sandefur, J., & Sandholtz, W. A. (2017). Can Outsourcing Improve Liberia's Schools? Preliminary Results from Year One of a Three-Year Randomized Evaluation of Partnership Schools for Liberia. *SSRN Electronic Journal*. doi:10.2139/ssrn.3062941
- Singh, D. (2015). Global Action Week for Education – Education as a public good and moral obligation [Interview]. In UNESCO. Retrieved April 2, 2019, from <https://en.unesco.org/news/global-action-week-education-education-public-good-and-moral-obligation>

Steer, L., Gillard, J., Gustafsson-Wright, E., & Latham (2015, October). *Non-state actors in education in developing countries* (Framing paper for discussion). Retrieved from www.brookings.edu/wp-content/uploads/2016/06/102215-Non-State-Actors-in-Education-Framing-paper-Final.pdf

Teachers in developing countries: A survey of employment conditions. (1991). International Labour Office.

The Education Alliance. <http://www.theeducationalliance.org/wp-content/uploads/2016/05/SQEP-Year-1-Report.pdf> (2013). Retrieved from <http://www.theeducationalliance.org/>;

The School Quality Enhancement Program at The South Delhi Municipal Corporation Progress Report: 2016-2017 (Progress Report). (2017). The Education Alliance.

The Southern and Eastern Africa Consortium for Monitoring Educational Quality. (2018, October 01). Retrieved from <http://www.sacmeq.org/>

Tooley J, Longfield D. *The Role and Impact of Private Schools in Developing Countries: A response to the DFID-commissioned “Rigorous Literature Review”*. London: Pearson, 2015.

Tooley, J., & Dixon, P. (2005). *Private education is good for the poor: A study of private schools serving the poor in low-income countries*. Cato Institute.

Tooley, J., Bao, Y., Dixon, P., & Merrifield, J. (2011). School Choice and Academic Performance: Some Evidence From Developing Countries. *Journal of School Choice*, 5(1), 1-39. doi:10.1080/15582159.2011.548234

Werner, G. (2017, January 3). Liberia has to work with international private school companies if we want to protect our children’s future.. Retrieved from <https://qz.com/africa/876708/why-liberia-is-working-with-bridge-international-brac-and-rising-academies-by-education-minister-george-werner/>

World Bank. 2011. *Philippines Private Provision, Public Purpose : A Review of the Government’s Education Service Contracting Program*. Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/27406> License: CC BY 3.0 IGO.

