

How to Deliver Improved Outcomes for School Systems

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WISE

world innovation summit for education
مؤتمر القمة العالمي للابتكار في التعليم

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Michael Barber

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How to Deliver Improved Outcomes for School Systems

Michael Barber

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Foreword

Educators broadly agree on how to make education effective and relevant to contemporary needs in any context around the world. The core requirements are clear. Well-qualified teachers, active leadership, supportive school systems, engaged, responsive parents and communities, committed public investment and private collaboration are essential. Yet despite much progress, too many students, particularly in developing regions, are not gaining the basic life skills, knowledge and attitudes needed to thrive. In wealthier societies, spending increases have not always led to improved quality and access. Old models established to meet the needs of past ages persist awkwardly alongside ongoing efforts to integrate technology with student-centered, skill-focused approaches.

In much of the world growing income inequalities have fueled instability, denying communities the tools of development, including effective, quality education for rising generations. The political turmoil, conflict and forced migration we witnessed following the Arab Spring have produced the challenge of a massive refugee crisis in Europe. This current turmoil reflects both the reality of global interconnection as well as fragmentation and disruption.

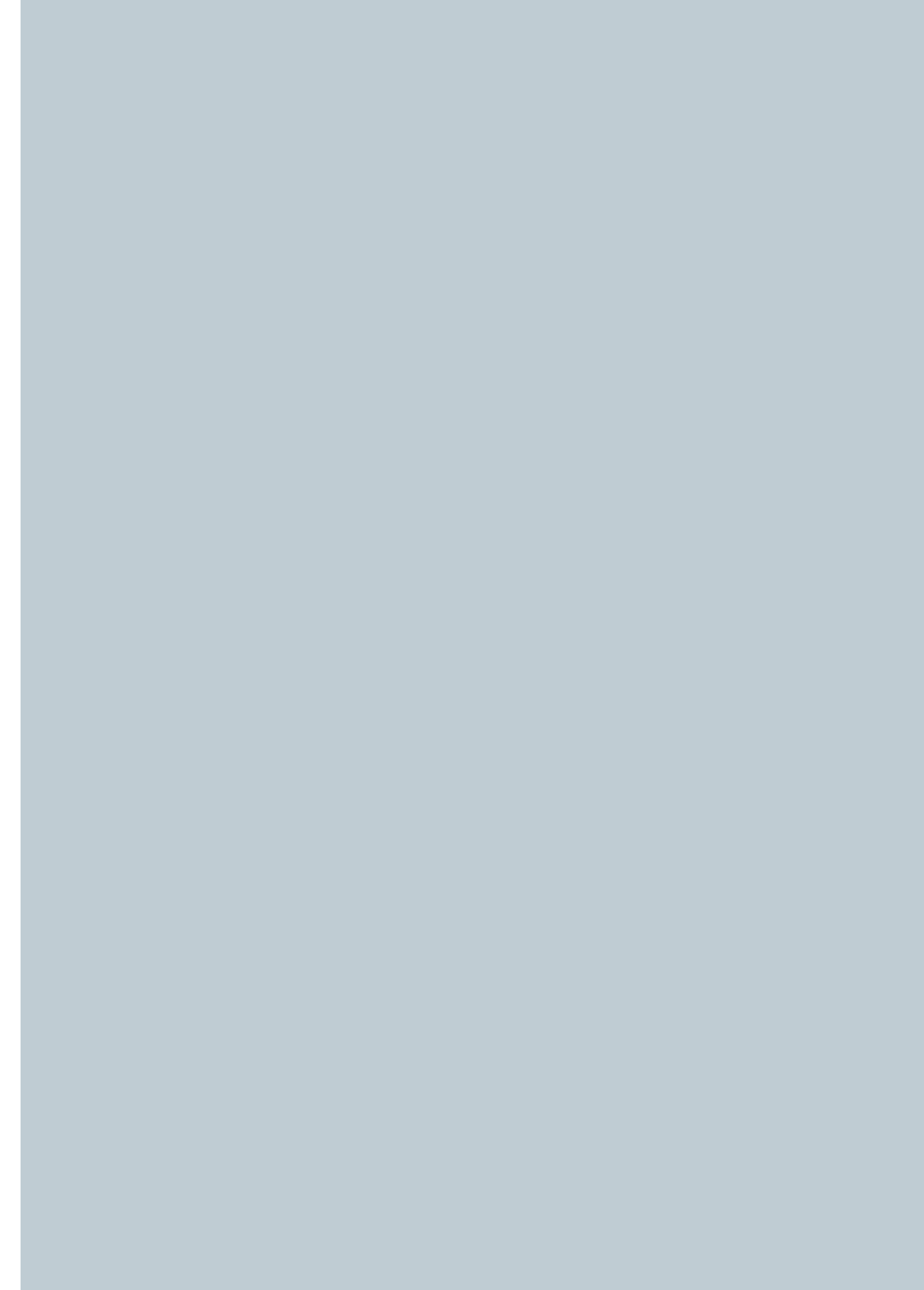
As education advocates we must not allow uncertainty and turmoil to distract us from our crucial pursuit of reform. Educators too can seize opportunity from disruption. Sir Michael Barber's disruptive approach is a clarion call for leaders to vigorously deliver, and manage, bold, far-reaching reform. Informed through long experience in government, he embraces a qualitative shift from distracting debate over policy formation and advocacy, to robust 'delivery' of results. It's a leap, he believes, that is essential to the success of any educator's best prescriptions.

For this WISE Report, Sir Michael has expanded the important lessons of his book, *How to Run a Government*, with supplemental case studies of diverse school systems in Qatar, Jordan, the United Kingdom, and the Punjab in Pakistan, as well as interviews, and literature reviews. The unique value of the report may be the broad applicability of its universal concepts shown over a range of contexts reflected in the case studies.

WISE is committed to promoting quality education as a universal right. Through the WISE biennial global summit, an expanding research series and action-oriented ongoing programs, WISE is establishing itself as a 'thinking and doing tank'. Michael Barber's robust approach to 'deliverology' aligns well with our dedication to creative action and innovation in education. In bringing his delivery framework to a wider audience, we hope to encourage more global education leaders to engage with the details of issues that matter most, and to provide further insights and guidance based on their own unique

experiences. I am confident that, with the encouragement and validation this report provides, our education leaders will take decisive action to unleash the tremendous creative resources of our hopeful, rising generations, and all ages, through access to relevant, quality education.

Stavros N. Yiannouka
CEO
WISE



Introduction

The Importance of Effective Delivery in School Systems

Many governments aspire to improve school education — many by investing heavily in it. Few succeed in improving outcomes. There is a delivery chasm between aspiration and reality. For example, the population of Uganda, already well over 30 million, is growing at one million per year. Seventy-eight percent of the population are under the age of 30. The average inhabitant of the country is a 14-year-old girl, yet a recent newspaper headline declared, “80 percent of teachers can’t read”¹

Newspaper headlines are not always the most reliable sources, but the facts are clear; in Uganda, as in many other sub-Saharan African countries, teachers’ knowledge and skills, to say nothing of their daily attendance, are not what they need to be if the country is to seize the potential of a young population in the twenty-first century.

Uganda is just one example. In Ethiopia over 70 percent of the population are also under 30, and while enrollment and teacher attendance rates are significantly better than Uganda’s, the challenge of quality is now being taken on by government. Egypt has similar challenges, and faces a further major challenge; even for those who are educated, job opportunities need to be created. Thirty-four per cent of graduates there are unemployed. This challenge is not confined to Africa. In Greece, youth unemployment is 50 percent, in Spain, 44 percent.

In southern Europe these figures may be stark, however the challenge of transformation is by no means confined to only those countries hit hardest by the Euro crisis. For example, the OECD reports that the UK lags behind other advanced nations in basic attainment levels among 16 to 24-year-olds, and the majority of unskilled adults receive no formal training in the workplace. In the UK, as elsewhere, “the best single predictor of later participation in education is earlier participation” i.e. those who fail at school are often destined to fall ever further behind.²

In the USA, the picture is no better. It was recently reported that in the United States, a child raised in a family with earnings in the bottom quartile nationally is six times less likely to graduate from college than a child whose family’s earning is in the top quartile.³ Despite increased attention and investment over the last 50 years. The achievement gap between white and black students in the USA is still shocking. In both mathematics and reading, 87 percent of white students scored ahead of the average black 12th grader.⁴

Even in Canada where school performance has generally been in the top handful globally, there are minorities who fail dramatically. The most devastating example is the fact that six out of ten First Nations who live on reserves, and three out of ten who live off reserves, are high school drop outs. The national high school drop out average is one out of ten.⁵

In short, even the best systems face significant challenges. All systems require major improvement in learner outcomes and much greater equity as a precondition for future social and economic success. For those furthest behind, such as many systems in South Asia or sub-Saharan Africa, the challenge is truly daunting. The word ‘crisis’ may be overused in the modern world, but it is surely appropriate here.

As if this were not enough, technological developments are likely to transform labor markets and the very nature of work within ten to 15 years; certainly well within the first half of the adult lifetimes of those leaving school now.

It is estimated, for example, that:

- Forty-seven percent of US jobs are at high risk from automation in the next decade or two.⁶
- Autonomous cars are now predicted to be with us by 2020, or before.⁷
- 3D printing will have an economic impact of \$230 billion (US) to \$550 billion by 2025 based on shorter production cycles, reduced waste and the value of customization.⁸

These radical shifts will change the nature of demand for skills and have incalculable implications for school systems. The need for the transformation of school systems is therefore not just a priority, it is an urgent one. Indeed, failure to tackle these profound challenges is already fueling unrest and disaffection across the globe.

The Arab Spring highlighted several issues, including the limited employment prospects for young people across the region. In 2013, youth unemployment across the Middle East and North Africa (MENA) was 14 percent, double the world average.⁹ In some areas it is even more severe. For example, youth employment ranged between 30 and 43 percent in Egypt, Palestine and Tunisia in 2011.¹⁰

Addressing the educational needs of school age refugees is an immediate challenge for the region. The UN predicts that even if the crisis ended immediately, which is highly unlikely, it would still take between eight and ten years for the refugees to return to Syria.¹¹ Education levels for registered Syrian refugees are generally low, with 80 percent of refugees in Lebanon and Jordan not holding more than primary education. Over two million of those displaced in Syria receive no formal education, and almost 50 percent of Syrian children in host countries are not enrolled in schools.¹²

Given this state of affairs, the evident under-performance of education systems around the world and the radical shift in demand for skills, one might anticipate there would be a clamour for reform among those who work in educational systems, such teachers and officials, or those who depend on them, such as parents and families. In practice, these groups all too often resist change or argue for incremental change, partly because change is necessarily difficult and discomfiting, and partly because they prefer to argue that the answer is investing more money.

Of course, investment matters. However, if more money alone were the answer, the problem would be solved by now. In fact, while expenditure has risen substantially, outcomes have remained largely flat, even in the world's best performing systems. In Australia, for instance, spending per student has increased by 14 percent over the past 10 years, but performance is “broadly unchanged”.¹³ In the USA, spending per student has increased by 300 percent since 1966, but this investment has failed to translate into comparable improvements in outcomes. Of all students in the USA, less than one third are proficient in mathematics and reading. But the USA is not alone. In the case of mathematics, none of the top nine performing countries in the first survey recorded a statistically significant improvement (see Figure 1).

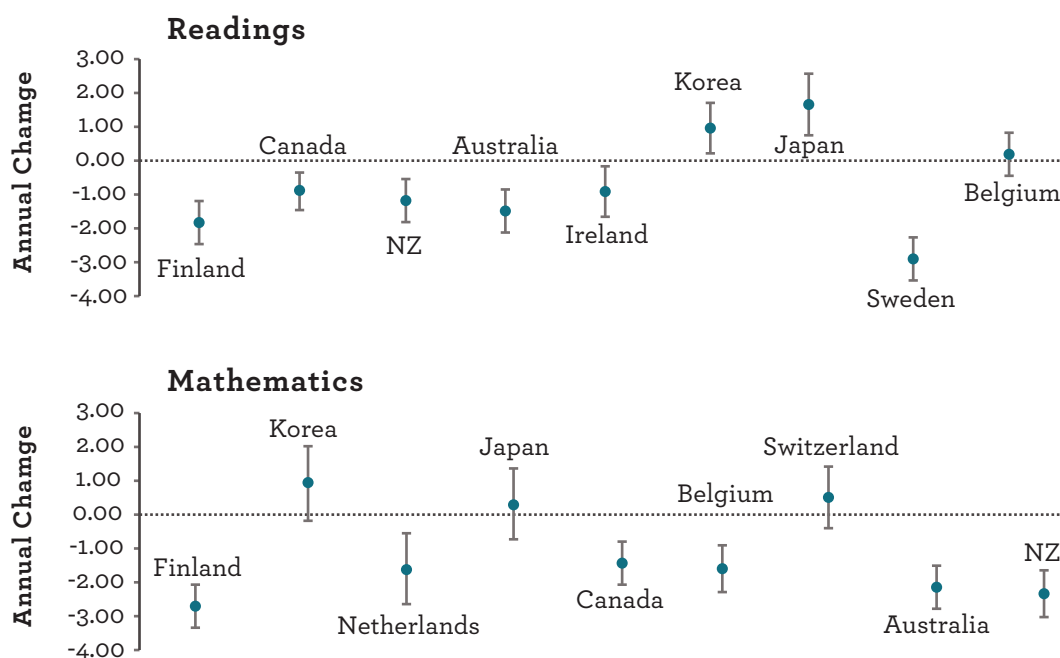


Figure 1: Annualized change across PISA assessments of reading and mathematics for top nine performing countries.
(Source: Barber and Hill, 2014)¹⁴

The only way individual education systems, and all of us globally, can meet the educational challenge of the mid twenty-first century is to embrace comprehensive education reform and to do so as a matter of urgency.

What this requires was explored in depth in *Oceans of Innovation*, which I co-authored with Katelyn Donnelly and Saad Rizvi.¹⁵ In that report, we argued that the education system of the future must find ways to integrate systematic capacity to innovate whole system reform. This will require a shift in working, because unfortunately, much of the education reform debate in recent decades has set up innovation and whole system reform in opposition when they can, and must, go together. As the diagram below shows, this requires education systems to use evidence of impact to drive a whole system of reform, while also building the capacity to innovate, and learn from that innovation to continuously improve the system (see Figure 2).

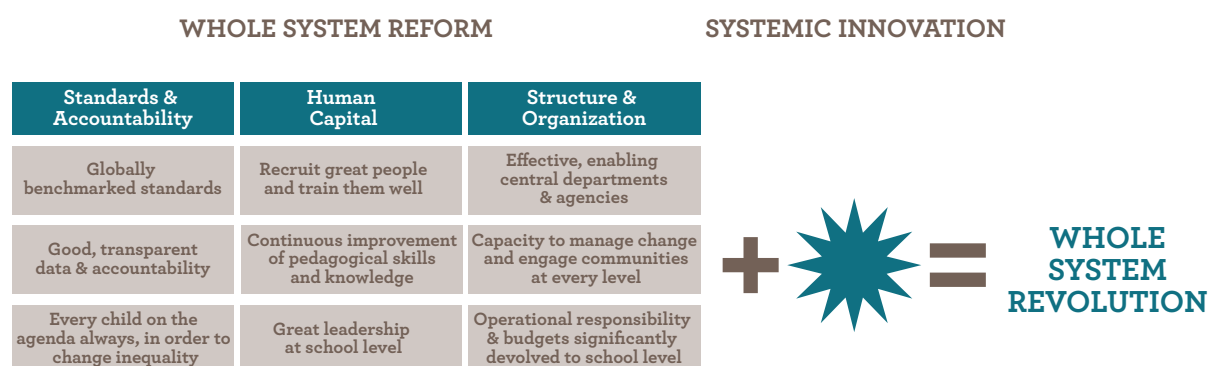


Figure 2: Whole System Reform (Source: Barber, Donnelly & Rizvi, 2012)⁴⁶

In summary, education systems require both comprehensive reform and the capacity to innovate. Too often, education debate suggests these are alternatives.

The third element of a successful whole system revolution is touched on in that paper, but not spelled out; that is, effective, sustained implementation or delivery. History is littered with education reforms of real promise, which failed because implementation was mismanaged or ineffective.

Fortunately, there is a growing evidence base not just of what works in education reform, but also in effective implementation. What the President of the World Bank, Jim Kim, describes as “the science of delivery” is emerging rapidly and becoming ever clearer as experience and analysis of a variety of different efforts deepens. In my dialogue with presidents, prime ministers and education ministers, I find increasingly that they know how important education is, and they know what they want to do, but they worry about how to get it done in practice.

Often this evidence base is summarized as the need to set up a delivery unit at the heart of government or the heart of an education ministry. In almost every case, these delivery units have their conceptual origin in the Delivery Unit, which I set up for Prime Minister Tony Blair in the UK in 2001. This turned out to be a global innovation, although we didn’t know it at the time.

Since then there have been many attempts to replicate or emulate that original model. Some, including the original model, have been successful; some have improved on it, while others have fared much less well.

My book, *How to Run a Government* (2016), was written to distil the wisdom these experiments in delivery taught us. What were the characteristics of those that succeeded and the lessons of those that failed? How could they be summarized in a compelling way to help those who wanted to know how to deliver?

The first and most important message is that success is about much more than a unit. While an effective delivery unit can undoubtedly play a major part, more important is a sustained, thought-through, systematic approach to getting things done, and, guiding all those effort must be a determination that the ultimate purpose of reform and implementation is not just radical change, but also significant, visible improvement in outcomes for citizens. In the case of school systems this means real, visible improvements in the learning outcomes of students. In plain language they can read better, write better, calculate better, know more, understand more and do more! Incidentally, this includes gaining the inter-personal and intra-personal skills that require students to take more responsibility for themselves, and to become team players. Test scores are important as a means of representing (some of) these outcomes, but they are not themselves the point; much more important is that students are learning more, are feeling more fulfilled, are sensing both challenge and support from great teachers, and are emerging from school ready for the twenty-first century. Anything less is not delivery.

The evidence base of what works in delivery, set out in *How to Run a Government*, forms the basis for the way this report is structured. In broad terms, this report takes the key headings in the book and focuses them specifically on school systems. In preparing this report, in addition to drawing on my book, we have reviewed other relevant and contemporary literature; we have analyzed some secondary data specifically in relation to school systems; and we have interviewed several experts in the field to enable us to refine and round out the argument. Needless to say, the evidence base in education is not always as comprehensive as we might wish it to be. This report is not an academic review of the literature, but an attempt to distil lessons from *How to Run a Government*, and supplement it with additional research.

A note on the examples

Throughout the report, we draw on several programs and interventions to help illustrate the key concepts of delivering education reform. Here are further details:

The Maharaty project (formerly known as **LitNum**)¹⁷

Where: Qatar

What: A program to help improve performance in Arabic and English literacy and numeracy. It is an initiative founded by HE Sheikha Hind bint Hamad Al-Thani, in 2014, and functions under the Qatari Ministry of Education and Higher Education. Maharaty is a partnership between the Ministry and 18 independent primary schools.

How: A comprehensive program that has been designed to work with as many stakeholders as possible to ensure that the children are fully supported in their learning journey. This includes the development and provision of assessments, lesson plans and accompanying materials, school leadership, coordinator and teacher training, one-to-one coaching for teachers in the schools, forums for principals, parents and school social workers, and participation in community events.

INJAZ

Where: Jordan (all 12 districts)

What: A not-for-profit organization focused on youth empowerment, and linking the public, private and civil society sectors to help bridge the skills gap between the education system and the labor market.¹⁸

How: It works with students from grade 7 to university level, and provides activities to help improve financial literacy, communication, social, interpersonal, and creative skills. For youth in college and university, direct links are provided to employers to help build their professional skillset. INJAZ engages volunteer trainers from both the public and private sectors to teach its courses; volunteers teach one hour per week for six to eight weeks every fall and spring semester, depending on the nature of the course.¹⁹

Impact: INJAZ's graduates had an unemployment rate of 19 percent compared with the national rate of 32 percent. About 13 percent of INJAZ's graduates waited up to one year for a job, compared with 70 percent of the nation's unemployed.²⁰

UK Prime Minister's Delivery Unit (PMDU)

Where: United Kingdom

What: In 2001, the PMDU was set up within the Prime Minister's Office, to provide support and scrutiny to deliver a number of policy priorities.

How: The PMDU was a small, focused team reporting to the Prime Minister. It pioneered the ‘deliverology’ methodology, and is typified by five key features: 1) setting priorities with measurable goals; 2) using data and trajectories to drive progress; 3) building routines around priorities; 4) helping government officials with problem solving; and 5) being persistent.

Impact: By 2005, a range of priorities, across healthcare improvements and crime reduction to an improvement in railway services, “had either been delivered or were heading firmly in the right direction”. As an example, the PMDU helped reduce the number of patients waiting a year or more for a surgical operation from over 40,000 in 2001, to under 10,000 in 2003.²¹

Punjab Education Reforms

Where: Punjab, Pakistan

What: In 2014, the Chief Minister of Punjab created the Special Monitoring Unit as a delivery unit to drive reforms in education, health, sanitation and clean drinking water. It built on a successful delivery approach applied initially in the education department.

How: In 2011, with the support of Sir Michael Barber, the government launched the Education Reform Road Map. This reform focused on transforming education standards, and improving the attainment for millions of children. The principles of ‘deliverology’ were at its core, with data a prominent feature. Monthly data for core indicators were rapidly collected and analyzed, and shared back with schools to show where targets were met or missed.²²

Impact: Between 2011 and 2016, primary school enrollment increased from 84.8 percent to 90.4 percent, translating into an additional one million students attending school each day. Educating girls remains a strong focus and there has been an increase in the gender parity index from 0.85 to 0.91.²³

Jordan Education Initiative (JEI)

Where: Jordan

What: A program initiated during the World Economic Forum in 2003, JEI is one of Her Majesty’s Queen Rania Al Abdullah not-for-profit organizations. It was created to utilize technology to transform the school environment.

How: The JEI is a public-private partnership involving a range of global and local partners to apply technology, training and change management, to improve as many public schools as possible. The involvement of global partners was a strategic move to accelerate education reform, and to help facilitate the growth of the local ICT industry.²⁴

Impact: Since 2003, 9,000 teachers have been trained, and 108,000 students nationwide have benefited from increased technological integration in their learning.²⁵

It is worth pointing out that the evidence base is building all the time. For example, philanthropic organizations are encouraging developments in this field. Bloomberg Philanthropies have funded and built Innovation Delivery Teams (or “i-teams”) in the USA and Europe. The World Bank has its own Delivery Unit that is assembling knowledge and insight from around the world. Meanwhile WISE, who has supported the drafting of this report, seeks to foster innovative solutions to global education and provide a platform for education policy reform around the world.

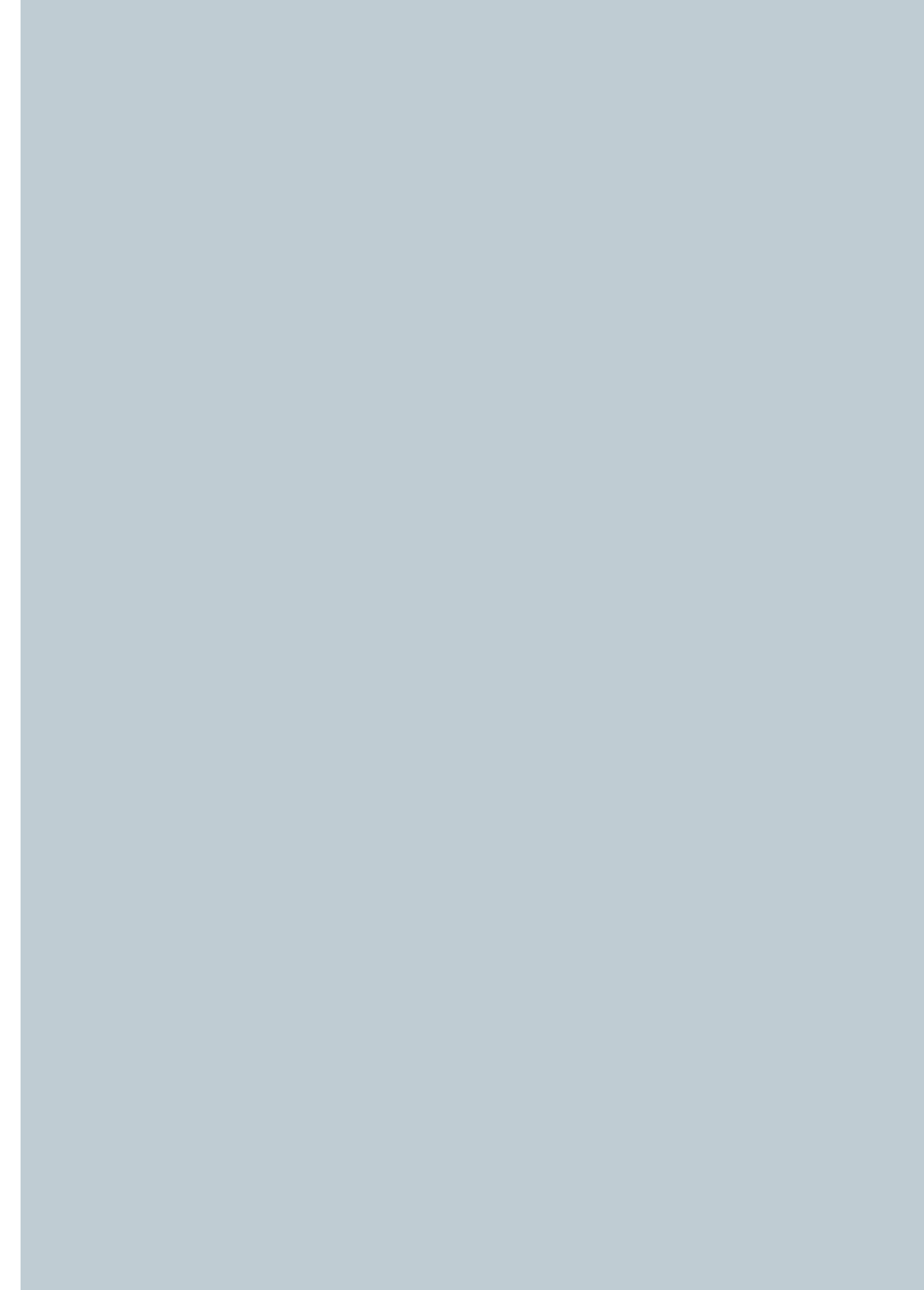
A broader trend, which is directly relevant, is the growing interest globally in “What Works” centers and networks. They are pulling together, more systematically than ever before, the evidence on which policy can draw as it is designed. Examples include the Education Endowment Foundation in England which analyzes the most effective interventions in raising attainment, the What Works Cities initiative in the USA providing technical assistance on data in government, the Washington State Institute for Public Policy guiding investment decisions made by the state legislature, and the What Works Clearing House for evidence-based programs.

One key element is the importance of engaging local stakeholders. This doesn’t mean giving up on ambition or compromising at the first sign of conflict; it does mean having a compelling vision, a rich dialogue and ensuring that implementation takes account of the likely attitude of diverse interests.

The science of delivery is becoming more convincing all the time, but is still in its infancy and, in any case, it will never be a pure science. The arts of politics, negotiation and influence will always remain unpredictable, to some extent. History never repeats itself. The record can never be set straight because it was never straight in the first place. In the face of often mighty forces even the most admirable human beings remain flawed. Under pressure, judgments, however imperfect, need to be made.

We hope the publication of our report will encourage further development in the evidence base, and therefore the understanding of what needs to be done and how it can be done effectively. Most importantly though, given the urgent need for effectively implemented, comprehensive educational reform, we hope that by reviewing the evidence base in a relatively brief report, we will help those who have the awesome responsibility of leading education systems – whether politically, professionally or administratively – to act more effectively than they would otherwise be able to do.

The moment for bold action has arrived. This is our final point. However well-designed an education reform is, and however well the approach to delivery is prepared, none of it will change outcomes for the better without courageous leadership and sustained focus – often through tough times – on getting the job done. Our report is therefore dedicated to courageous education leaders, whoever and wherever they are. We firmly believe this is their time. It will also be of interest to other ministers, especially finance ministers, who understand that education is of fundamental importance to the future of every country. We also, of course, hope it will be of interest to presidents and prime ministers.



Chapter 1

Priorities & Targets

The starting point for all political leaders, and others who want to improve education outcomes, is to ask exactly what it is they want to do. This sounds straightforward and easy to advocate, but it is difficult to do in practice and requires great discipline.

There is no shortage of challenges facing education systems around the world, and there is a bewildering array of potential solutions available to try to tackle them. The OECD counted 63 major policy options for school reform in 2015, with over 450 separate initiatives undertaken across 34 member states in recent years.²⁶ The question many ask is: where to begin?

To help guide the prioritization process, a few steps can be followed:

1. Decide on your priorities

The first step is to decide what you want to achieve. It's one thing to decide your priorities; it is another to decide how ambitious you want to be. How much change do you want, and how fast? In political circles, a favorite phrase is 'under promise and over deliver' and of course there is a point to this. It implies managing expectations, setting some achievable, modest goals, and then doing better than expected – the idea being that the electorate will be duly impressed.

Other leaders have been bolder and, in many instances, uncompromising. Margaret Thatcher was elected at a moment of economic and social crisis in the UK, but when the worst of it was past and many of her ministers were urging her to take a softer line, she said famously, "You turn if you want to. This lady's not for turning." Similarly, in his second term, Tony Blair was determined to bring about irreversible structural reforms of both health and education. Najib Razak in Malaysia opted for transformation rather than a quiet life.

In my personal experience, many politicians find it hard to be as clear about their priorities as the leaders mentioned here but, if they fail to prioritize, they struggle to deliver anything of significance.

2. Decide on your level of ambition

The degree of ambition will depend to a certain extent upon the political context. The dilemma for government officials in the twenty-first century is that people are impatient for results. If results are not produced quickly, the pressure from the people (and the media) intensifies, and political support can crumble. For political leaders who want reform, the paradox is that they need a long-term strategy if they are to secure irreversible reform, however unless they deliver short-term results, no one believes them.

The Map of Delivery shown below was first used in the UK Prime Minister's Delivery Unit and it helps determine the appropriate level of ambition for reform efforts.

A Map of Delivery

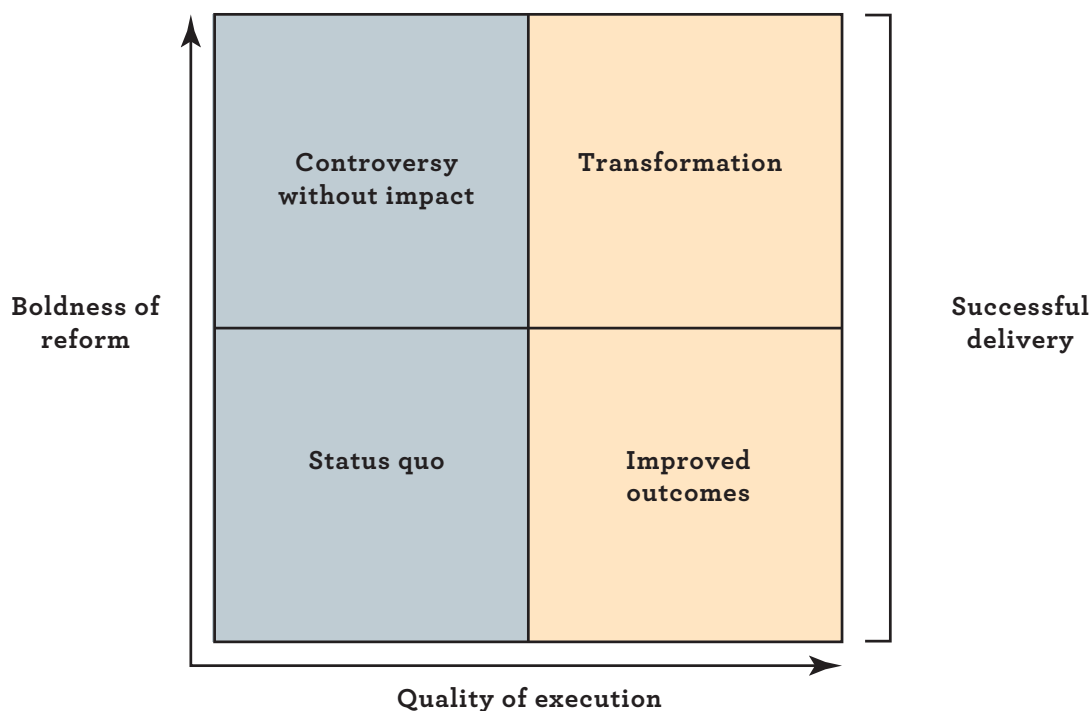


Figure 3: Map of Delivery²⁷

The vertical axis on the Map of Delivery refers to the boldness of the reform efforts. Some people are bold by nature, others are more cautious. Even if they are bold, very few would want everything in the ‘transformation box’ at the outset, as the risk would be too high.

The horizontal axis deals with the quality of execution. A cautious idea implemented well may provide the short-term results that are needed. For a bold idea, the map helps ask the pertinent question: how will you get it done? This prompts strategic thinking.

At the starting point of reform, efforts may be on the left of the map and are likely to move to the right over time. As an example, Joel Klein, former chancellor of New York City Schools, delivered rapid early improvements in elementary test scores that helped build confidence in the program before embarking on more radical change.

3. Set a small number of well-designed targets

Priorities and ambition are the necessary building blocks for transformation, but they need to be accompanied by defining the intended outcomes. Targets, or making clear what success looks like, help to clarify what will be achieved in terms that people understand. They also make it possible to hold government departments to account.

Consistent with the emphasis on priorities, it's important not to have too many targets. Najib Razak in Malaysia chose six areas. Dalton McGuinty, the education premier in Ontario, set three for his education system: improved performance in literacy, numeracy and graduate rates; narrowed gaps between disadvantaged groups and the rest; and improved confidence in the system. Similarly, in Punjab, the chief minister set a handful of measurable goals for education and health reforms.

I find many people, within and outside governments, argue against “targets”. The word is not the important point; the important point is that governments should be able to define for the public the success they aspire to achieve.

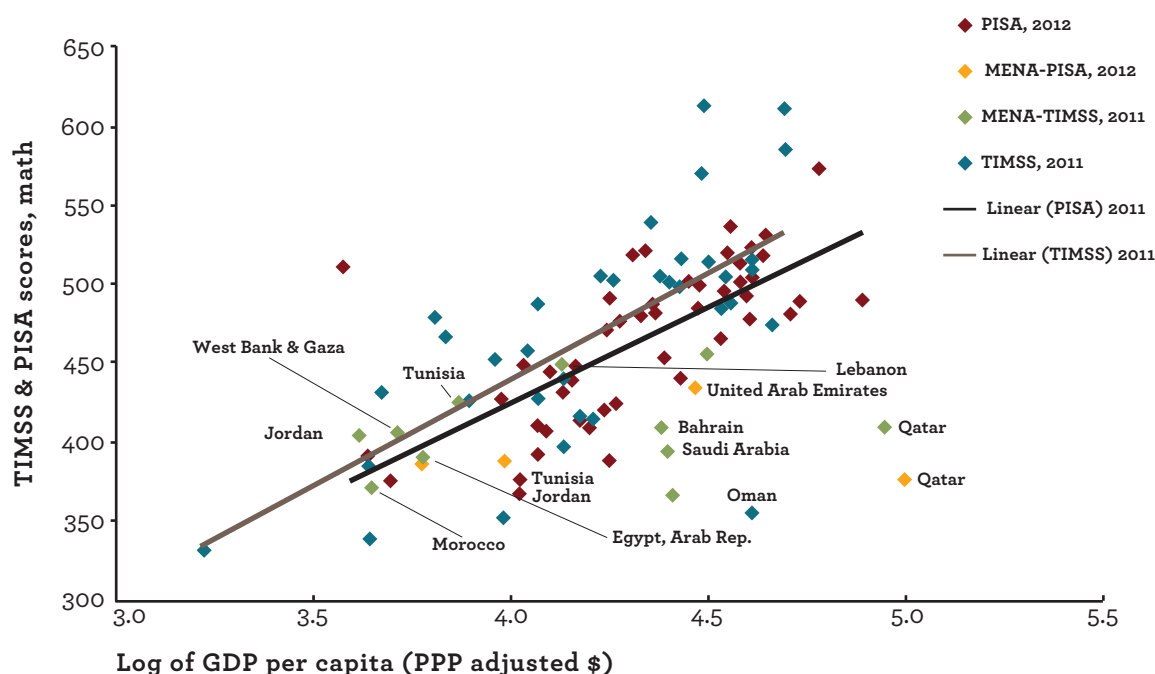
4. Set benchmarks

Once the priority is settled and the target is established, the science of target setting can be applied. The best way to do this is through benchmarking. There are several ways of benchmarking and they can be used in combination.

The first type of benchmarking is against history. As the statistics in the introduction demonstrate, most countries across the Middle East require improvements in many areas of their education system. Past or current levels could therefore be used as a benchmark, with targets set to improve over time.

Targets can also be set for countries to be as good as their neighbors or peers. There are numerous surveys or scores to draw upon, such as the Program for International Student Assessment (PISA), the Trends in International Mathematics and Science Study (TIMSS), or the Progress in International Reading Literacy Study (PIRLS).

As the chart below shows, students in the Middle East and North Africa (MENA) countries are behind most other countries in basic reading, mathematics and science, as measured by data from the 2012 PISA report, and data from the 2011 TIMSS report.²⁸



Notes: PISA = Programme for International Student Assessment; TIMSS = Trends in International Mathematics & Science Study; MENA = Middle East & North Africa; PPP = purchasing power parity; GDP = gross domestic product.
Sources: TIMSS, 2011; PISA, 2012

Figure 4: Benchmarking student math scores against levels of GDP per capita: MENA economies, 2011 and 2012
(Source: World Bank, 2015)²⁹

In December 2016, the updated PISA scores were released, and countries across the Middle East and North Africa as noted in the graph above, were still in below the OECD average in mathematics, reading and science.³⁰ In addition, the 2016 TIMSS data showed that the lowest performers were Jordan, Saudi Arabia, Morocco, and Kuwait, with Kuwait and Jordan experiencing a decline in performance across all four categories between 2011 and 2015.³¹

In the absence of detailed examples of how middle income countries have made progress in reforming their education systems, benchmarks make a useful starting point.³² International benchmarking was an important component of Jordan's reform efforts. Benchmarking against international surveys of student achievement, and the constant feedback between researchers and the education system that this provided, is cited as one of the main drivers of Jordan's significant advances in attaining education outcomes, with Jordan making an impressive 30-point gain on the science portion of the TIMSS between 2000 and 2006.³³

Another useful type of benchmarking is within a system. In Punjab, for instance, each of the 36 districts can see how its performance compares with the education outcomes in the other 35 districts. It would be possible, for example, to set a target for the whole system to match the performance of the best performing 25 percent of districts.

Precisely where the target is set will involve a combination of judgment as to the level of ambition, along with benchmarking and policy analysis.

5. Check for perverse or unintended consequences

In the quest for finding what works in achieving education outcomes, you may also find what doesn't work. When setting targets, it's imperative that risks are taken into consideration to help identify and understand perverse or unintended consequences.

These checks are not a one-off exercise. Data should be checked periodically to identify any unintended negative consequences. With the Punjab Education Roadmap, for instance, independent people are employed to review the effectiveness of the data collection process and the accuracy of the data. In Punjab, it was found that in some cases people were checking the headcount of students, something crucial for measuring progress on student attendance, against the register rather than by actually counting children, yet it was known that the registers were often inaccurate. This bad practice was then stopped.

Another simple but essential point is the importance of triangulating your data. Alongside your chosen dataset, make sure there is an alternative dataset, which is ideally outside of the control of government, and which covers the same themes. It will help ensure that movements in your dataset are real and not manipulated, and it will provide you with a strong foundation when you need to communicate your success (or failure).

In addition, it's important to remember that changing an education system, or indeed any major public service, will cause those who don't want a given target to argue against it. As much as possible, these discussions need to take place with the public, in the media and elsewhere. If you don't engage, your critics will fill the vacuum and lead the narrative.

6. Consult without conceding on ambition

A question for decision makers is how much to consult on targets and priorities. There are a range of options. For example, the Malaysian government went out of its way to consult citizens about the reform agenda, undertaking a major survey of the population, and hiring a venue where the opposition, the media, and the country's vibrant blogger community could come and discuss the targets and implementation plans.

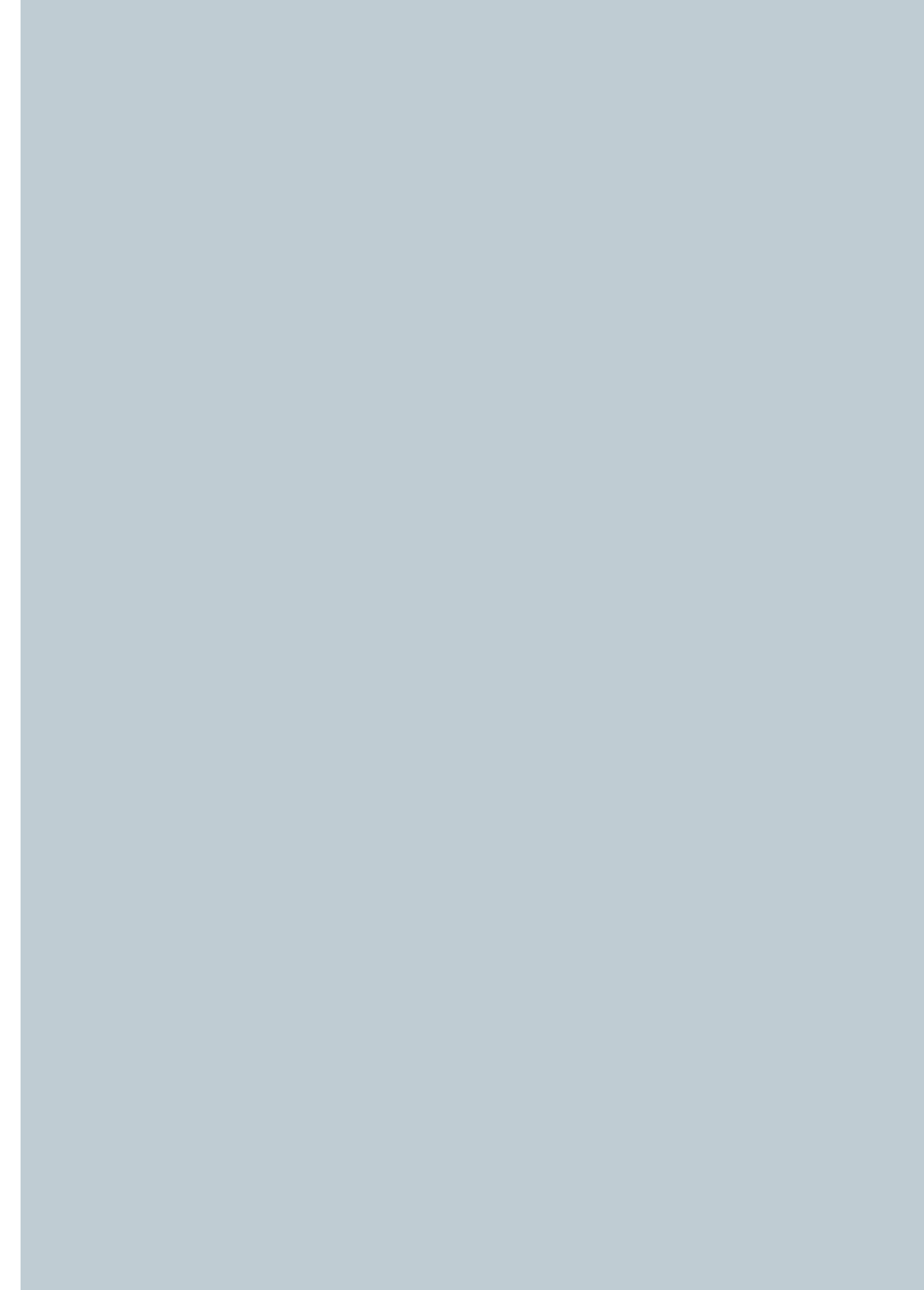
Other approaches are less open and consultative. For instance, in the Punjab reforms, the chief minister simply asserted what he wanted: 100 percent enrollment, improved attendance, and much higher quality education. To achieve this level of ambition in a complex system, the targets need to be cascaded out, often in the face of resistance and skepticism. In cases like this, a top-down approach is often the most effective. In Punjab, the efforts were led by the secretary of schools, and by 2013, the province, and nearly all of the districts, had met or exceeded their targets. 'Top down' is often hurled as a term of abuse, but there are circumstances when it's the best approach, and a massively underperforming school system is a case in point.

A middle ground approach would be to have a negotiating process. This approach was used in the UK to implement the National Literacy Strategy. With the national target set, the statisticians in the Department for Education produced targets for each of the 150 local authorities. Representatives from local authorities were asked for their views on what was proposed. Once set, these targets helped create a data-informed dialogue in which progress towards the target could be assessed. Within two years even the lowest performing local areas had outperformed the original national average, further evidence of the power of ambition to drive progress.

7. Craft a compelling narrative

Targets and data are important, but they need to be set within a context and surrounded by a compelling narrative. This helps to ensure the best possible prediction, and to ensure that those involved are motivated by a moral purpose. Take, for instance, the statistics outlined in the annex showing the low levels of attainment in much of the MENA region. Achieving a certain pass rate in literacy and mathematics is important, but it's not the main point. The main point is that children should be leaving primary school with the ability to read and write, skills that are essential in the modern world and that will change their lives.

In Dubai, for instance, school reform efforts involved the introduction of a new inspection regime. To ensure that different stakeholders were informed, a communications campaign was carefully crafted, targeting the different groups — such as parents, private school owners, the business community, and media — who were affected by the change. The communication has been so successful that the new transparency about school performance is deemed “irreversible”, with the data now viewed by parents and media as an “entitlement”.³⁴ This is vital in two ways. Firstly, it puts pressure on those delivering services to perform well (a point we will return to in Chapter 3), and secondly, it helps make change irreversible by maintaining focus on delivery, a key concept we will cover in Chapter 7.





Chapter 2

Organization

Once you've worked out what it is you want to do, you need to work out what organization you need to put in place to deliver the change. The necessary capacity and capability to deliver the reform efforts may already exist within government, or you may need to develop it, such as through creating a delivery unit.

The first step to understanding what is needed and challenging the status quo is to undertake a Delivery Capacity Review. Its five sections help enable the department leading a reform to:^a

1. develop a foundation for delivery
2. understand the delivery challenge
3. plan for delivery
4. drive delivery
5. create an irreversible delivery culture

Within each section a question is asked. For example, under 'Plan for Delivery', do plans track relevant performance metrics, leading indicators and implementation indicators for each intervention? For each of the fifteen modules, the team responsible can score itself from Red (not remotely ready) to Green (ready to go), with Amber-Red and Amber-Green in between. These scores can be captured in a Capacity Review Summary to tell you, and others, exactly where your delivery capacity challenges are so you can address them.

The Capacity Review Summary for the country shows both areas of strength & opportunities for growth

1. Develop the Foundation	2. Understand the Challenge	3. Plan for Delivery	4. Drive Delivery	5. Create Irreversibility
Define your aspiration	Evaluate Past and Present Performance	Determine Reform Strategy	Routines	Build system capacity all the time
Review current state of delivery		Draw the delivery chain	Solve problems early & rigorously	Communicate the delivery message
Build the delivery unit	Understand Drivers of Performance & relevant system activities	Set Target & Trajectories	Sustain & Continually build momentum	Unleash the "Alchemy" of Relationships
Establish a guiding coalition				

Key: Green = on target; Light Green = on target but with concerns; Amber- = significant areas for concern; Red = not remotely ready.

Figure 5: Capacity Review Summary

^a See *Deliverology 101* for a more detailed explanation.

The Delivery Capacity Review is intended to be action-oriented, with a quick assessment made, rather than a lengthy review period lasting many weeks or months. It's also important that people feel able to be truthful and to confront the facts, however brutal they might be.

In addition to discussing the capacity with those directly involved in delivery, workshops and focus groups can also be held with other stakeholders in the wider system. This can help show what is done well, what has been achieved, and what has been done badly. A key interview in this part of the process is with the top official or minister in the system. Done well, within three to four weeks, a minister can have an accurate portrayal of the capacity of his or her department.

To help build capacity, several Gulf States often hire external consultants to advise and assist with reform efforts. This support can be valuable, but it needs to be a deliberate effort to build the institutional capacity within the government architecture to ensure that change happens over the longer term.³⁵

Delivery Units

Delivery Units are often created in response to an evident capacity gap. In Ontario, Dalton McGuinty established a Literacy and Numeracy Secretariat in the education department to drive teacher development because teachers felt that civil servants were not capable of a deep dialogue about teaching and learning. In Malaysia, Najib Razak made civil servant training a central element of reform as he knew that without it delivery would not happen. At the same time, he established Pemandu, closely modelled on the UK Prime Minister's Delivery Unit, to drive the agenda forward.

A delivery unit helps ensure that the leader's time is applied systematically and routinely to priorities, and that implementation is taken seriously. It can also ensure that all relevant departments and agencies contribute to achieving a government goal, helping to overcome the silo effect caused when departments and agencies do not collaborate, something common in many democracies. Finally, a delivery unit can become a center of expertise on delivery and implementation.

A delivery unit should be small in relation to the overall task and focused solely on the priorities that have been identified. In the UK Prime Minister's Delivery Unit, there were 40 people pursuing 20 priorities across four major departments. In the Louisiana Department of Education, there were three or four people in the delivery unit to drive through big change in outcomes, particularly graduate rates from high school. The Punjab Special Monitoring Unit has a dozen people tracking progress in education, health and the provision of clean drinking water.

Leadership

Leadership is essential. The table below outlines the attributes required in the leader of a delivery unit.

Characteristic	Reason
Completely trusted by the PM or CM	Has to be able to represent the PM effectively and be the bearer of bad tidings sometimes
Determined hard working and focused	Because without these characteristics, delivery is unthinkable
Optimistic and confident	As with great sports people, belief is a vital ingredient of success. If the head of the delivery unit doesn't believe that success is possible, why should anyone else?
Good at building relationships	There will be many sensitive conversations to be had, especially when things are going wrong. The delivery unit head needs to be a calm, problem-solving influence.
Happy to be out of the limelight, giving credit to others	If there is delivery in health, the minister of health should get the credit... the delivery unit needs to help others succeed and give them the credit (which is the currency of politics)
Have a successful track record in business or government	A track record is essential for credibility, especially at the beginning.

Figure 6: The required attributes of the Delivery Unit leader (Source: How to Run a Government, p. 40)

The culture within a delivery unit needs to be fostered. In the original PMDU, the culture was built around five key words:³⁶

1. **Ambition** — No compromise. That's what it takes.
2. **Focus** — Never be distracted.
3. **Clarity** — Collect and examine the data. Confront the brutal facts and don't be afraid to tell the prime minister.
4. **Urgency** — Constantly counteract the tendency of bureaucracies to delay.
5. **Irreversibility** — See the change through so it will stay changed.

The other central tenet to a delivery unit is simplicity. When working in government with such complex systems, a delivery unit should calmly and persistently ask the same five questions until the required answers are supplied. The five key questions are:³⁷

- What are you trying to do?
- How are you trying to do it?
- How, at any given moment, do you know if you are on track?
- If you are not on track, what are you going to do about it?
- Can we help?

Alongside these questions, were a set of characteristics which became emblematic of the PMDU. The approach of the PMDU, and indeed any delivery unit, should emphasize and avoid the following characteristics. In effect, this became a “contract” between the PMDU and the departments it works with.

The delivery unit should avoid...	The delivery unit should emphasize...
Micro management	Keeping the PM well informed about key priorities
Generating bureaucracy or unnecessary work	Consistent pursuit of those priorities
Getting in the way	Data and evidence
Policy (gimmicks)	Plain speaking
Being driven by headlines	Early identification of problems
Short-termism	Imaginative problem-solving
Opinion without evidence	Application of best practice
Changing the goalposts	Recognizing differences as well as similarities between departments
	Urgency
	Building capacity
	Leaving responsibility and credit where they belong
	The expectation of success

The single most important aspect is the leadership of the unit. In my personal experience, a combination of humility, persistence, loyalty to the minister and ambition for success are rewarded.

Project management offices

Another model to assist with delivery is a Project Management Office (PMO). To assist with reform efforts, the Jordan Education Initiative had a PMO to help track progress, and to hold partners and delivery agents to account.³⁸

Sometimes these PMO efforts fail because delivery is not, in fact, a separate project to be managed; it is the core work. Unless a delivery effort affects how the whole system operates it will fail, so the Delivery Unit needs to be at the heart of government.

Delivery capacity can also be supplemented by leveraging external resources. INJAZ, a not for profit in Jordan which helps young people develop the skills they will need in the workplace, delivers the program through a network of more than 23,000 trained volunteers. By leveraging private sector capacity, INJAZ has scaled to reach all twelve governorates across Jordan.³⁹

Guiding coalitions

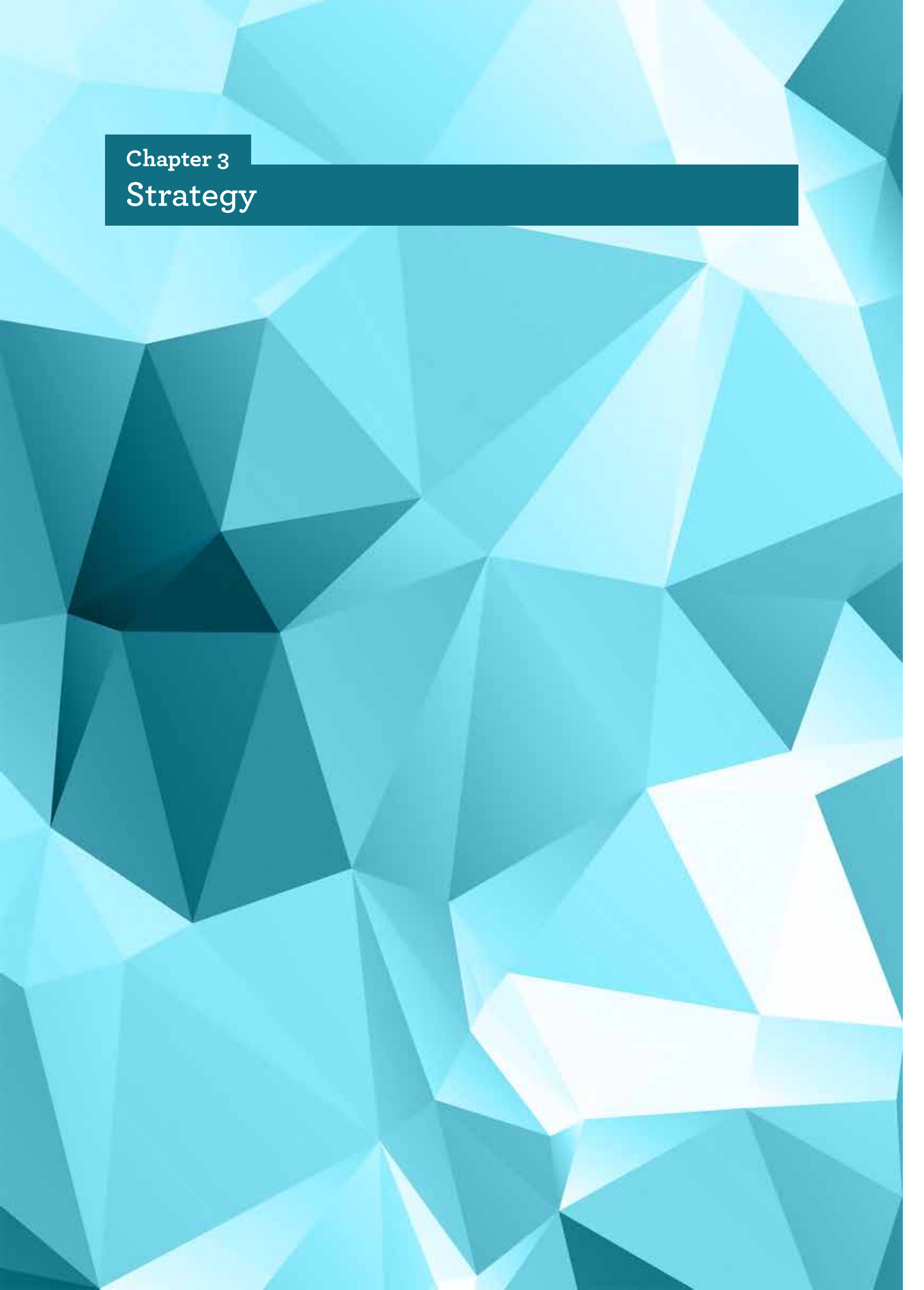
The concept of a guiding coalition was outlined in John Kotter's book, *Leading Change*, a guide to successful business leadership.⁴⁰ Rather than a management team, a guiding coalition is a shared understanding amongst seven to ten people in leadership positions about what needs to be done and how. The lessons for the science of delivery, which can be gleaned from Kotter's book, are that for each key goal one must: identify seven to ten key positions; seek to make compatible appointments, and make time early on to create shared understanding. Honest dialogue amongst this group will ensure problems of implementation are identified and resolved and thus enable more rapid and effective implementation.

As an example, the Jordan Education Initiative, which aims to integrate ICT as a teaching tool, has an executive committee comprised of the Ministry of Education, the Ministry of ICT, Ministry of Planning, and international partners, including Cisco, Microsoft, USAID, Fastlink, the World Economic Forum, and Intel.

All the key players in a setting like this need to actively contribute to solving problems rather than allowing a commitment to become formulaic.

Civil Service Reform

Civil service reform to create an effective delivery architecture that benefits citizens is essential. The lesson for the science of delivery is clear: don't avoid civil service reform, but equally, don't let it absorb you and the bureaucracy either. Setting your goals and focusing on delivering them is what citizens will want.



Chapter 3
Strategy

Strategy is the broad approach to achieving your goals. When developing strategy there are a number of starting points. However, what is central is that sound strategy is a precondition of successful delivery. Strategy without delivery is vacuous; delivery without strategy is incoherent.

There are five broad approaches for governments to draw upon when developing strategy. These are summarized in the diagram below. Each of these will be discussed in turn.

Getting the policy right: Five paradigms of system reform

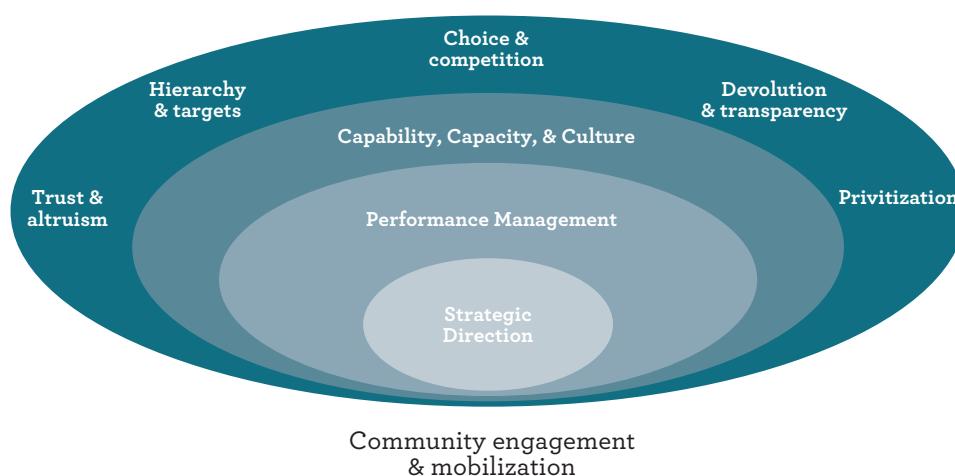


Figure 7: Five paradigms of system reform (Source: *How to Run a Government*, p. 112)

Approach 1: Trust and Altruism

Trust and altruism is the approach that everyone would like to work, and which many governments have adopted. It is also the default approach for many school systems across the world.

In this model, the basic idea of government is to staff the service with professionals, to fund inputs – such as salaries, buildings and equipment – and then to leave them to get on with it. It's believed, that due to professional ethics, they will do their best for those they endeavor to serve.

Yet the evidence shows that all too often this doesn't work. Reliance on trust and altruism explains why so many school systems barely improved over recent decades. The cause of the failure is that public service professionals can be altruistic, but are also, like all human beings, motivated by self-interest. Professions are powerful, and their cultures strong. This can be positive, such as when doctors react to emergency situations, or not, such as when a quarter of teachers in India don't turn up on any given day.

In Ghana, for example, you can see trust and altruism at its worse. Many teachers don't teach, and some don't even attend. Removing ineffective teachers is impossible, and teachers' pay accounts for over 95 percent of the education budget leaving little money for anything else. Most teachers are unmotivated, with learning suffering as a result.

There are other places where trust and altruism is working. Take Finland, for instance, which is famed for an outstanding school system. Teachers are given extensive professional autonomy and deliver high quality education across virtually all schools. The secret to Finland’s success is, in brief, the fact that teaching is a very hard profession to join in Finland. Education is highly valued and respected in the culture, and it is the best and brightest who aspire to a teaching career.

Learning from a system like Finland’s is admirable, but replicating it is extremely difficult, and for many countries an inappropriate starting point. In most parts of the world, the Middle East included, the professional culture is very different.

Approach 2: Hierarchy and Targets (or Command and Control)

This approach involves the implementation of a change by government in a top-down fashion. Although unpopular with professionals, because they often feel the pressure, the evidence suggests that implemented well and in a sustained manner, it can be effective. It can be particularly effective in improving underperforming services, which also provides the opportunity to use a particularly useful tool of policy making, the Performance Wedge.

You can mandate adequacy...greatness has to be unleashed.

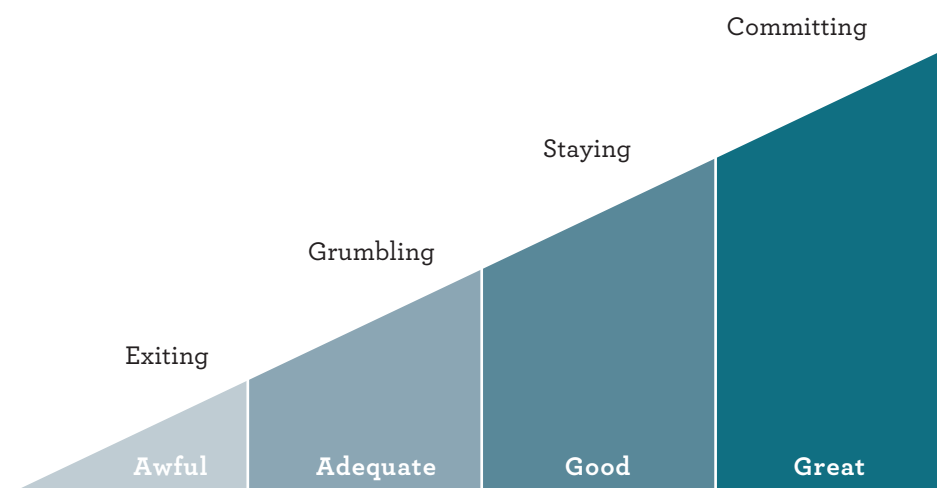


Figure 8: Performance Wedge (Source: *How to Run a Government* p. 69)

Above the wedge are adjectives that describe the attitudes of citizens as performance improves. If the service is awful, citizens will exit if they can. They will continue to grumble if performance reaches adequate. Only when services become good are citizens satisfied.

It can be argued that command and control is the best way to move from awful to adequate. After all, there is no point relying on altruism where a service is awful.

This was true for healthcare improvements in England. After a series of failures in the NHS, star rating systems were implemented in the early 2000s, putting pressure on failing providers to improve their performance. In 2002, the star system was used to grade ambulance trusts, with one to three stars given based on performance against several key targets and indicators in a balanced scorecard. Trusts that failed were ‘named and shamed’. Those achieving the highest rating were publicly celebrated. This approach helped England to successfully hit its target for ambulances to respond to 75 percent of emergency calls within eight minutes.⁴¹

Another example of this approach is the Punjab Education Roadmap, which began in 2011. The hierarchy and targets approach has been applied across a province with over 20 million school-age children and more than 50,000 government schools. Setting targets and introducing effective hierarchical management has led to significant increases in enrollment, student and teacher attendance, and provision of facilities and educational materials. Learning outcomes have begun to move positively, though there is a long way to go. The school system has moved from awful to a point where it is manageable and becoming adequate. A key ingredient of the Roadmap is the data collected on key indicators from every school each month.

It’s a major challenge to sustain this approach and then move from adequate to good, and on to great. The government’s approach has to change. As Joel Klein, former chancellor of schools in New York City, put it: “You can mandate adequacy but you cannot mandate greatness; it has to be unleashed” (Source: *How to Run a Government*, p. 71).

Approach 3: Choice and Competition

This approach has been at the heart of many reform efforts, including those of Tony Blair during his second term, and has also featured strongly in the school reforms in the US, in places such as New Orleans and Boston. Recent TIMSS results (2015) for the US and England suggests this approach could be a positive influence; and it has already been demonstrably successful in England’s health reforms.

Choice and competition has been advanced by the theorist Julian Le Grand. He argues that choice and competition helps empower citizens, and incentivizes public sector institutions and professions.⁴² To be effective, users of a service, such as students and parents, must be given a real choice and the information on which to base their decision. Money must then follow these choices so that the most successful providers gain, and the less successful struggle.

In theory this sounds straightforward, but in reality public services are rarely pure markets. For education officials, there are practical considerations. For instance, if the quasi-market results in some schools benefitting at the expense of others, a failing school surely cannot be allowed to wither away, offering poor education to fewer and fewer children. It would require government intervention. At this point, choice and competition policy may need a dose of hierarchies and targets to make it work.

Another challenge when applying market thinking to public services is to ensure that equity is protected, or perhaps even enhanced. In a school system, if the money follows the student, then students from low-income families could receive more, as they do in England, but often not in the USA. In Punjab, vouchers can be redeemed at registered private schools, but they are targeted at poor families whose children are not in school. In contrast, a voucher scheme was used in Chile in the 1990s. The voucher was universal, and resulted in subsidizing the school fees of the rich, and enabling the poor to pay for rudimentary education in a public school, increasing the size of an already wide equity gap. This problem has since been ameliorated by introducing variable vouchers. In Punjab, the vouchers are specifically targeted at poor families thus contributing to greater equity.

Another challenge for governments when following this route is to ensure that there is genuine choice. In some locations, such as rural areas, a full range of options may not make sense. Some of the best thinking on this has been done among charter schools in the US, particularly those in large urban districts. In New Orleans, for instance, the vast majority of children are in charter schools. Charter providers were attracted to the city by a not-for-profit organization, New Schools for New Orleans, bringing diversity of provision, while the public authorities created the policy framework that offers parents' choice and rewarded those school providers which delivered outcomes. However, it is worth noting, charter schools are not without their critics who claim that charter schools widen choice but do not necessarily improve performance,⁴³ achievement, or equity.⁴⁴ The keys to success for charter schools are in the details of the how they are run and how the policy framework is set up.

Approach 4: Devolution and Transparency

This approach is particularly appropriate where choice doesn't work well, such as immigration systems or in running prisons. In these instances, there is no obvious customer as the customer is in effect the government working on behalf of citizens. It is also an appropriate option in school systems, often alongside one of the other options.

In these instances, power and responsibility can be devolved to managers working close to the frontline, and then, through transparent publication of data on outcomes, holding them to account. This approach worked well in Punjab, Pakistan, where rankings of performance helped drive up school performance. Each month, the data on key indicators, such as teacher presence or student attendance, was collected from every school. This enabled the thirty-six education district officers to be ranked, with the top performers rewarded both financially and symbolically, a cup of tea with the chief minister being highly prized. At the same time, questions are asked of the low performers, and sometimes they are moved on.

The implications for professional reputations by publishing data can create powerful incentives to drive improvements. In Tuscany, the Performance Evaluation System for health, which involved imaginatively displaying

rankings on a “dartboard”, enabled benchmarking across the region and learning from the best performers on different indicators, as a spur to improve performance.⁴⁵

In 1999, power in the UK was devolved to the nations. This resulted in differing approaches to school and hospital governance in England and Wales. ‘Trust and altruism’ — as outlined in Approach 1 above — was used in Wales, resulting in poor performance in schools and hospitals. In contrast, hierarchy and targets, alongside choice and devolution was used in England, and resulted in improved examination performance in schools, and improvements in hospitals, with long waiting times eliminated.⁴⁶

This was compelling evidence that this combination of approaches works, especially in moving Awful performance towards Adequate or Good. The challenge for politicians is the need to take on interest groups, particularly public sector unions, who may well resist transparency.

Approach 5: Contracting Out, Privatization and Vouchers

Contracting out services has been a major theme in public policy in recent decades. As an example, the Jordan Education Initiative, launched in 2003, is a public-private partnership that integrates ICT as a tool for teaching and learning. The involvement of global partners was a strategic move to accelerate education reform, and to help facilitate the growth of the local ICT industry.⁴⁷

If contracting out is to be successful, then officials need to ensure that contracts are clear, and that officials can build credible working relationships. These relationships need to be fostered: contracts never take care of themselves. It is important to be clear that this is not privatization since government remains the funder and regulator, if not the provider.

Privatization is different than the four previous approaches in that reform is sidestepped in favor of selling off the service and letting the market take hold. While this might work in some aspects of government, it is not appropriate for school systems and, for good reasons, no government has attempted it.

In other areas, well-designed privatization is a serious policy option. It can reduce the size of the state, help raise revenue and enable the state to focus on the things that matter most to citizens, such as increasing security, reducing crime, improving health and education and providing a climate for investment and economic growth.

With vouchers, the basic idea is that when a state makes a service available, instead of funding it directly, the state gives money to each consumer/citizen that enables consumers to buy the service themselves. The premise is that markets are more likely to produce quality than monopoly public services. In schools, vouchers were first advocated by Milton Friedman in 1962. Parents receive vouchers and spend them on behalf of their child. Simple in theory, but there are a number of issues to consider. First, a universal voucher scheme will give vouchers, provided for by the public purse, to parents who have opted out

of the state system and whose children are in private schools. This is a dead weight cost, a state subsidy to parents who evidently don't need it. Second, poorer parents may not be able to "top up" the vouchers and are restricted to schools with only government funding. Third, the administration of vouchers can be challenging. The precise design of the voucher system is the key to ensuring that it enhances rather than undermines equity.

In Punjab, the voucher scheme is the fastest growing in the world with over 300,000 vouchers in the system for poor families whose children were out of school. The program has encountered challenges, such as: Identifying the deserving families (as there were poor records); registering eligible private schools; and ensuring that vouchers were as corruption-proof as possible. The administrative capacity is provided by the creation of the Punjab Education Foundation. Persevering to overcome these challenges reaped rewards. Since 2011, primary school enrollment has increased from just below 85 percent, to over 90 percent. An additional one million students are attending school each day. In addition, there has been a positive impact on educating girls, with the gender parity index increasing from 0.85 to 0.91.⁴⁸

Stewardship: The role of the center of a service

With all the approaches outlined, it is imperative that there is effective stewardship at the center of the service to ensure its long-term interests. This can be undertaken by government, or delegated in part to a regulator. Ministers and officials should aim not just to deliver their goals, but also to leave the system stronger and more resilient than they found it.

There also needs to be a monitoring system in place to measure outcomes. Where government abdicates this responsibility, too often the media will step in. In Ontario, when then premier Dalton McGuinty, said that the government would publish school test scores, rather than leaving it to the local newspaper, he received a standing ovation from teachers.

The final task for government officials is to ensure that the necessary human capital is in place, with the required skills and motivations. In education, where teaching is central to public service, the government has an even greater responsibility: to recruit, train and motivate high quality school leaders and teachers, for the short, medium and long-term.

There is also then the ongoing issue of the relationship between government and professionals. In Punjab, for instance, there have been strikes by teachers, as well as in a range of other public services. Teacher strikes are also common in Palestine where there was a strike over teachers' pay in 2016 that lasted weeks, and pitted teachers against their own unions.⁴⁹ Acrimony between teachers and government is also common across Africa, as well as Britain, Canada and America, often over issues of pay, conditions, pensions or workload, and sometimes about policy itself. This needs constant management. In his first year in office Dalton McGuinty negotiated four year contracts with teachers to get this "distraction" out of the way so he could focus on performance.

Community engagement

The education of children is something that people believe in and it often evokes strong views. It's essential that public officials find ways of delivering the best possible outcomes for taxpayers' money. Ways in which this can be fostered include:

1. **Transparency:** provide information about services, outcomes and threats.
2. **Open debate:** encourage dialogue between professionals and the public.
3. **Empowered communities:** enable community groups to take on services, and budgets that in past have been delivered by government. Two examples are Free Schools in the UK, and Charter Schools in the US.
4. **Social enterprise:** make it easier for people to establish social enterprises and to compete for services when they are contracted out.
5. **Social transformation:** celebrate those who assemble the disparate elements that create demonstrable change at the local level. One example is the Harlem Children's Zone.
6. **Competition:** shift the burden of proof so that services are contracted out unless there is good reason not to.
7. **Learn from business:** explore why some major companies, such as Apple, generate such passion.

The Arab Spring may, directly or indirectly, help improve the education system in the region. As the World Bank noted, it has prompted citizens to demand more of government, and to hold government to account in several areas, including education.⁵⁰ It remains to be seen whether governments across the region can meet these new expectations. A systematic approach to delivery would certainly help.

Policy-making

To turn strategy into practice requires detailed policy making as well as delivery. A good first question to ask when developing policy is: How does it relate to the strategy?

The civil service in the UK developed The Five Policy Tests.⁵¹

1. What's the point? Are you absolutely clear what the government wants to achieve?
2. What's it got to do with us? Are you absolutely clear what government's role is?

3. Who made you the expert? Are you confident that you are providing world leading policy advice based on the very latest expert thinking?
4. Is your advice predictable? Are you confident that you have explored the most radical and creative ideas available in this policy space, including doing nothing?
5. But will it actually work? Are you confident that your preferred approach can be delivered?

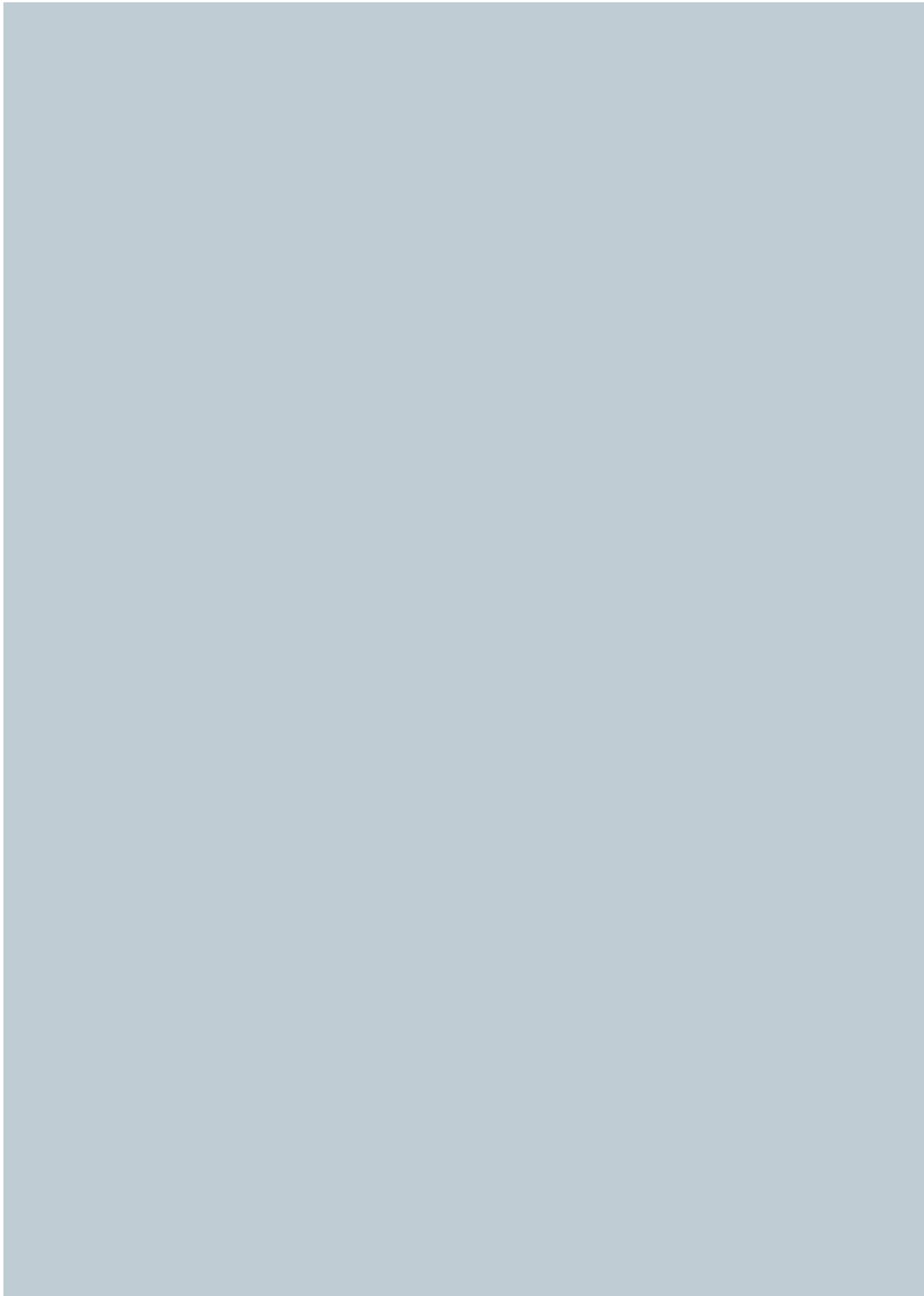
If you are satisfied these questions are answered, there are four more:

1. Would you be comfortable exposing your policy thinking to the highest level of challenge in the department?
2. Is your policy advice argued logically, succinctly, and free from jargon?
3. Is it free from errors?
4. Will your analysis and thinking be available for others to use and learn from?

Another approach to policy analysis is the Eightfold Path developed by Eugene Bardach. This can be applied across all policy domains, including education, and aims to draw on the intuition of practitioners as much as method. It comprises the following steps, which do not necessarily need to be followed in the order they are listed:⁵²

- Define the problem
- Assemble some evidence
- Construct the alternatives
- Select the criteria
- Project the outcomes
- Confront the trade-offs
- Decide!
- Tell your story

Too often policy papers are written without systematically addressing these vital questions and considerations.



Chapter 4

Planning

To drive delivery there needs to be a plan that officials can use and constantly update, to ensure that the set goals are met. Planning also ensures that the resilience and foresight to persist are in place. This section outlines the four aspects of planning to help achieve this, as well as the need to underpin plans with robust data, the potential need to create new structures, such as labs, and the need to tend to required changes in legislation.

Understand the problem

As John Kotter put it, the start of good planning is to “confront the brutal facts”.⁵⁹ This is not always easy; often neither political leaders nor officials want to hear the inconvenient truth.

For example, the Punjab Education Roadmap was launched after the chief minister heard for the first time the scale of the challenge in schools. The data showed that Punjab was not on track to hit the Millennium Development Goal of universal primary enrollment by 2015. No officials had told him that, with no one prepared to face the brutal facts. Once the chief minister understood the scale of the issue, planning could begin.

Work out how you will drive change

Once the problem is understood, the next step is to work out what needs to happen. The main thing to avoid is over-complexity. In Punjab, Pakistan, similar school systems were analyzed to understand how successful reforms were undertaken. Powerful stories at that time included Minas Gerais in Brazil, Western Cape in South Africa, and Madhya Pradesh in India. Learning from these cases, a roadmap plan was created for Punjab with five elements:

1. Data and Targets

Ambitious targets and trajectories would be set for the province and for each district.

2. District Administration

All appointments would be made based on merit, instead of on political connection, and the new district leaders would be trained to deliver the roadmap.

3. Teacher Quality

Lesson plans would be prepared for every one of 200,000 primary teachers in the province in English, mathematics and science, and they would be given training in how to use them, improving provision across those subjects.

4. Punjab Education Foundation

The PEF, an autonomous organization with government and donor funding, would bring in an element of choice and competition by funding low-cost private schools and expanding a voucher system for poor families.

5. Supporting Functions

Facilities at schools would be improved, among other things.

Prepare a plan

It does not matter at this stage if plans are incomplete, they can be updated as you go. The point is: develop a plan that gets things started.

The Punjab education example, mentioned above, illustrates several crucial steps towards developing a credible plan:

- Keep it simple; it doesn't need to be perfect, just good enough to get started.
- Expect conflict.
- Adhere to the principles and evidence; don't make too many concessions to get 'buy-in'.
- Don't forget the importance of the center of a system, even if you plan to devolve.
- Ensure the leader is on board.
- Get started.

Labs

One way to make policy is through 'laboratories' or 'labs'. One strong example of this approach is Pemandu, the Delivery Unit, in Malaysia. One lab was created for each of the six National Key Results Areas. The lab involved between forty and fifty people, and represented a mix drawn from within government and relevant fields, public and private, who could bring different perspectives on achieving the outcomes, from reducing crime to improving the transport system. Each lab had six weeks to arrive at a detailed implementation plan.

Idris Jala, the head of Pemandu, says there are several ingredients that make the lab different:

- Bringing together key relevant people from the public, private and NGO sectors

- ‘3 feet’ implementation programs—these avoid the ‘30,000 feet’ or ‘high-level overview’ perspective and focus on the close-to-the-ground reality
- Budget request as part of the output
- Key performance indicators assigned to relevant stakeholders
- Syndication sessions with top leadership

There are a range of different lab models around the world. Some focus on engaging citizens and other stakeholders in problem solving, and others advocate and assist the use of specific methods, such as design or behavioral insights.⁵⁴ One estimate suggests that new labs are being created at a rate of one a month.⁵⁵ The best labs work, but by no means do all of them conform to the model Idris Jala prescribes, and the effectiveness of the labs varies.

Legislation

As the plan develops, you may discover that the law needs to change. What this change entails will depend upon the country’s constitution.

Legislation is not only vital from a legitimacy and constitutional point of view, it’s also an opportunity to test the narrative, the strategy and potentially the organizational approach in the court of public opinion. By generating public debate, it can also help to define dividing lines between supporters and opponents and create momentum. Get it wrong and the opposite applies. Compromise may be necessary to build a coalition in the legislature capable of passing the law. After all, a majority is required. A sense of realism in government is essential, but equally, it is vital to guard against making so many compromises that the original intent becomes impossible. And of course, the opposition knows this, and will choose their tactics accordingly. If they cannot win outright, undermining the bill with a string of minor amendments is an attractive option.

The delivery chain

The plan will only succeed if the delivery chain is effective. For example, in the late 1990s, the National Literacy Strategy was put in place in England to improve standards of reading and writing amongst eleven-year-olds. Here a decision in Westminster required influencing a teacher. The first link in the chain the teacher is influenced by the school’s literacy co-coordinator, who in turn is influenced by the head teacher, the second and third links in the chain. The head teacher is influenced by the school governors and the local authority who in turn are influenced by the regional director of the National Literacy Strategy who answers to the national director of the strategy. He answers to the head of the Standards and Effectiveness Unit in the DfES, who answers to the secretary of state. And thus, we have established the delivery chain. Note that many of the links in the chain are not line management relationships, but nevertheless if a government is to deliver it needs to ensure they are strong and that the necessary capacity is in place at every level in the system.

Another example of a delivery chain is shown below, in a diagram depicting the delivery chain of education reform in Punjab, Pakistan.

A delivery chain for each objective identifies opportunities to strengthen implementation

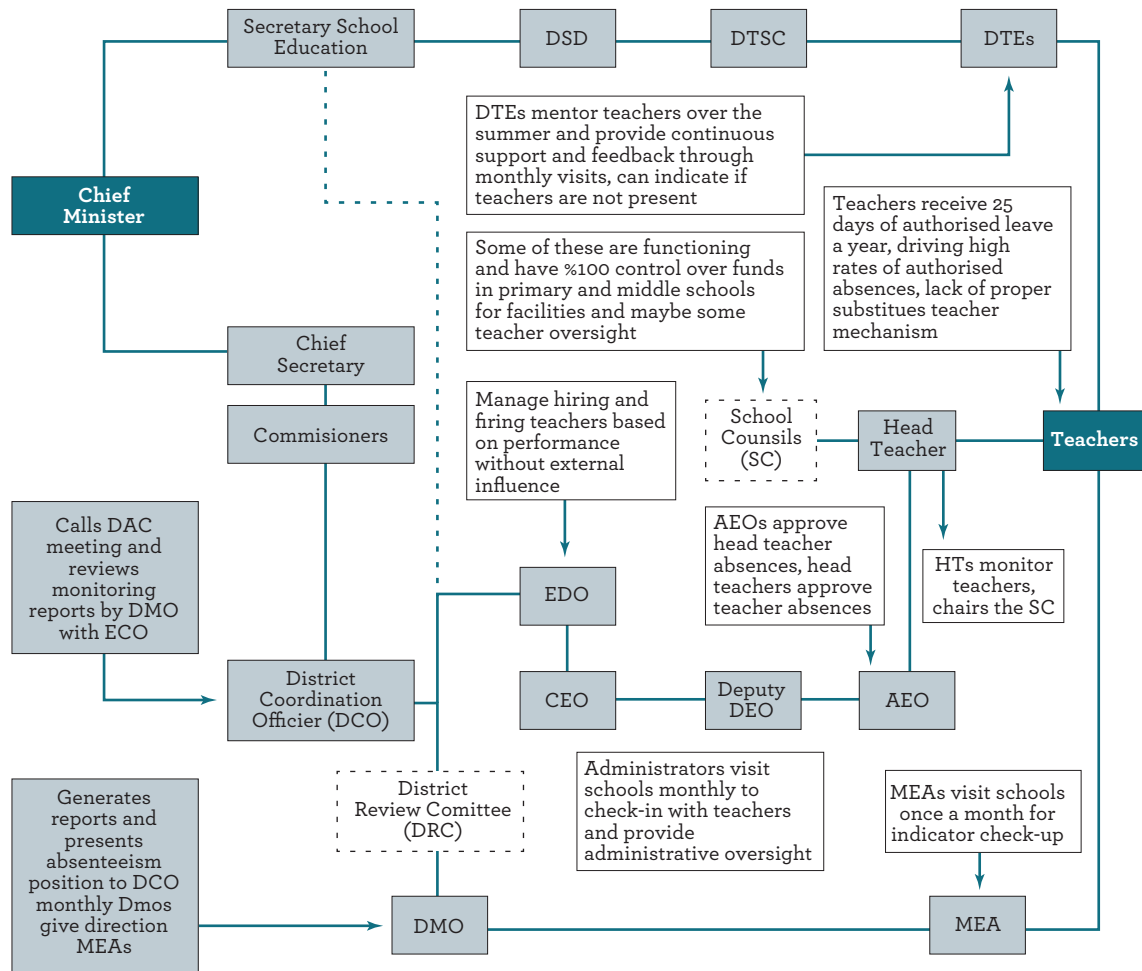


Figure 9: Delivery Chain — Punjab, Pakistan (Source: *How to Run a Government*, p. 120)

Unless there is clarity about how the delivery chain is intended to work, delivery will not occur.

Data and trajectories

Put simply, a trajectory is a line from where the data is now (and you will know this from your chosen metric), to where you would like it to go, based on your chosen aspiration. It is never quite this easy. The table below outlines a number of questions to help guide the development of a trajectory.

Constructing a Trajectory: The key questions	
1. What is the performance?	What data set are you going to rely on for your trajectory? What are its strengths and weaknesses?
2. What is the target?	What target have you set?
3. How will you collect the data?	Is your data collection system reliable? Does it give you the level of detail you need? Is it timely?
4. What is the historic data run?	What happened in the past with this indicator? Are there interesting blips and outliers?
5. How will you estimate the future?	Remembering of course that the human world rarely travels in straight lines...
6. Can data be broken down by locality?	Will you be able to see which regions/localities/hospitals/police forces, etc., are doing well and which aren't? Could you look at quartiles and track them separately?
7. Can data be broken down by category?	Can you separate out different crime types? Or types of operation? Or students by race and ethnicity? All these will help you understand?
8. Can data be broken down by policy?	Will you be able to see the impact of each of the different strands of your policy? Which are the big drivers of change? And which aren't?

Figure 10: Constructing a Trajectory: The Key Questions. (Source: *How to Run a Government*, p. 125)

Once developed, the trajectory becomes a crucial monitoring tool. Of course, it is dependent on data being collected, properly analyzed, and presented in a compelling fashion.

As an example, the Literacy and Numeracy Program (LitNum) in Qatar, now referred to as Maharaty, aims to accelerate learning in grades one to four, and has a dashboard recording real time data on student performance, student and teacher attendance and absenteeism. This data is used to refine interventions in schools.

The challenges associated with data collection should not be underestimated. From our review of the literature, and discussions with experts in the field, it's clear that data on impact is often missing from reform efforts, or where data does exist, it is patchy or unreliable. For instance, in Jordan, effective monitoring and evaluation is hindered by inadequate data collection and the lack of a holistic monitoring and evaluation framework used across all the government ministries and other stakeholders.⁵⁶ Data can also be missing from programs. For example, the Brookings Institution highlighted impact measurement as one of the “challenges on the horizon” for the INJAZ program we discuss in this paper. The Brookings Institution states, “It is clear that students’ exposure to entrepreneurial and workforce skills has grown through INJAZ’s expansion. [...] What is less clear, however, is what measurable impact this exposure is having on young people’s employment opportunities, civic engagement, life skills, and leadership skills. INJAZ will need to continue to rigorously test, report, and adjust based on these outcome metrics.”⁵⁷

Despite the complexities, efforts to generate robust data should be built early, with opportunities sought to build experimentation into the overall design to test different ways of working.

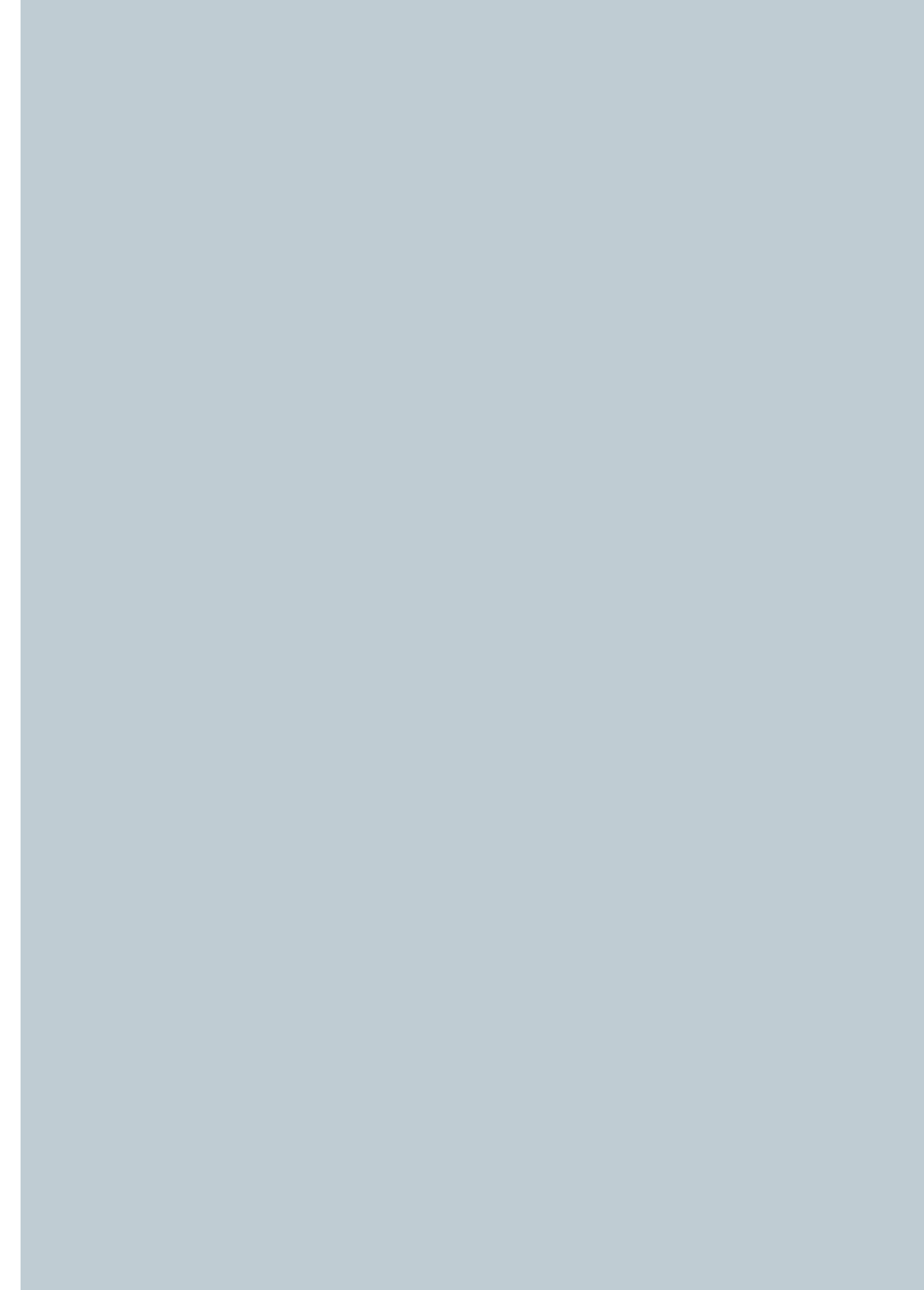
Many programs fail to collect sufficient data on effectiveness, and often, the data that is collected is about the outputs, such as number of young people involved, or about program process. Programs could benefit from developing a theory of change or a logic model. A theory of change is an articulation of the problem, and how the intervention could solve it. The logic model is a conceptualization of the program and the inputs, processes, activities, outputs, outcomes, and impacts that are expected to occur as a result of implementing the program or intervention. Once the inputs, processes, activities, outcomes and impacts are understood, and there is clarity as to how they relate to each other, then it can help inform the identification of appropriate indicators that can be tracked along the way.⁵⁸

The plan itself

Once you understand the problem, have decided what will drive change, produced a trajectory, and identified some lead indicators (early indicators that you are on track) the plan is almost complete.

You can test your plan against the following and refine it as necessary:

- Articulate its purpose. (What's it for?)
- Set out the key actions and make clear for each one who is responsible and when it is intended to happen. (Who will do what when?)
- Set out leadership and governance and how performance will be managed. (Who is in charge?)
- Show the delivery chain, with its strengths and weaknesses and how, where necessary, it will be strengthened. (How will you make this happen?)
- Incorporate benchmarking — what will you use as comparisons for both your implementation and trajectory? (What are the reference points?)
- Explain how key stakeholders will be managed. (What relationships matter most?)
- Identify the resources necessary to deliver. (How will you pay for it?)
- Anticipate and prepare to mitigate key risks. (What might go wrong?)





Chapter 5

Routines

For delivery to become part of education, resilience is needed. This resilience is partly a question of leadership and partly one of building the right processes (routines) into the way government operates. Routines should become habit, and the whole point of habits is that you do them as a matter of course. This creates a government and reform agenda that functions, with minimal surprises. It also means that crises and media stories don't deflect the leaders of reform from the core agenda of delivery.

As you put the routines in place, here are a few considerations to be aware of as implementation begins.

The launch

A launch is both an opportunity and potentially a moment of risk. Get it right and you can get on with the job, get it wrong and people are left confused.

- Before a launch there are some tough questions to ask:
- Do you really need a launch?
- If so, how much do you want to raise expectations?
- What form will it take?
- Who will make the announcement? Is he/she a seasoned professional? Do you really need that celebrity?
- What is the message? Will the reality bear it out? When?
- How does it connect to the big strategic themes?
- What will the critics say?
- What is the one-line (hopefully memorable) summary?
- What is the policy's name?

The implementation dip

Often as you start implementation there will be complaints and there may be resistance. Sometimes performance gets worse before it gets better. All this can add to an "implementation dip". Be ready for it and do not lose heart. Instead check your systems, continue to advocate and implement well. It takes serious political leadership to get through it.

Distraction

Crises will come and go in all countries, but they must not derail reform plans. In Punjab, for instance, the implementation of education reform was due to start after a devastating flood. Officials felt that they could no longer go on with the plans. It was at this moment that leadership was crucial. After all, the schools hadn't been improved by the flood. The reform was more important than ever.

Routines

The table below contrasts government by spasm against government by routine. Governments and departments that make this shift are likely to succeed.

Government by Spasm	Government by Routine
• Everything matters	• Clear Priorities
• Vague aspirations	• Specification of success
Crisis management	• Routine oversight
• Guesswork	• Data-informed
• Post-hoc evaluation	• Real-time data
• Massaged impressions	• An honest conversation
• Remote and slow	• In touch and rapid
• Present-focused	• Future-focused
• Hyperactivity	• Persistent drive
• Sound bites	• Dialogue
• Announcements	• Change on the ground
X	√

Figure 11: Government by spasm and by routine (Source: *How to Run a Government*, p. 154)

The left-hand column in the table above illustrates many of the bad habits common across government, with officials responding haphazardly, and with little consideration for effective implementation. The right-hand column shows how government looks when routine is at the core of how it functions. Here there is routine reporting, routine data collection, routine monitoring and routine problem solving. These routines are the essential components of the science of delivery.

In the UK Department for Education, systematic routines were created to check progress on delivery, helping improve literacy and numeracy in schools. This approach to structure and routines was then applied in the PMDU, helping Downing Street (home and office of the UK prime minister) to move away from reacting to new ideas, crises or media stories, and to focus on delivery.

Regular, structured meetings were a core part of the education reforms in New York City led by chancellor Klein. He met with the mayor and his advisors every week, with a keen focus on performance and data. As Klein noted, “the mayor understood and devoured data” and expected numbers on test scores, results, attendance and on how well the education department was performing.⁵⁹

Monthly notes

A regular update is important to ensure that officials and those in charge — the minister, for example — stay interested and informed. It also provides an opportunity for the political leader to provide regular feedback on how he or she sees progress. There are several aspects that can help ensure notes are interesting. First, they should be well written. Second, data should be presented in a consistent way so it's easy to see which way the data is going, and in order to show regional or other variations. Finally, the iconography of the note, the way it looks, should become familiar so that the reader can find what they are looking for rapidly.

Routine meetings or stock takes

For the science of delivery to work there need to be routine meetings. The table below shows how to run an effective meeting with a genuinely open dialogue.

Eleven characteristics of a good meeting
• A well-planned agenda with major focus on just one or two items.
• Enough time but not too much, and a clear endpoint.
• The right people in the room, not too many hangers-on and no one who drones on and on.
• Well-chaired, with a clear opening and a strong, action oriented summing up.
• Good, sharp briefing materials in advance.
• A shared acceptance of any data to be used (so time isn't wasted arguing about the validity of the data).
• A brief opening presentation. (No more than five minutes. Really.) This is in case someone, perhaps a prime minister, hasn't read the briefing.
• A collaborative atmosphere that allows—encourages even—divergent views.
• Live theatre, not over-planned ceremony.
• Genuine deliberation.
• Start and finish on time — or even early.

Figure 12: Eleven characteristics of a good meeting (Source: *How to Run a Government*, p. 160)

Planning a series of 'stocktakes' has a massive advantage in that it provides a series of deadlines. A deadline, even if it is not a hard one, will help structure the timelines for those responsible for different elements of delivery. For example, in Qatar, the Maharaty program has established internal routines, with weekly meetings, as well as weekly school visits, to track progress and identify issues.

The stocktake also provides opportunity for deliberation, where options are carefully considered and taken based on conferring and open, honest discussion.⁶⁰ In Punjab, District Education Authorities were proposed, taking on responsibility for education in each of the 36 districts. There was a

danger that this devolution could result in the Delivery Roadmap evolving and perhaps becoming ineffective. The risks were avoided by the stocktake meetings. The stocktakes ensured that all the right people were in the room at the same time, and helped present all relevant interests to facilitate a rounded discussion. The central figures in a stocktake are the leader (the minister), the head of delivery, and the top officials responsible for implementation.

Monitoring progress

Comparing delivery and benchmarking progress between schools and areas can be a spur for improvements. In Rio de Janeiro, key tests were introduced at the end of each two-month curriculum block. This rapid feedback loop provided a management tool for head teachers and education officials, with data analyzed at the school and individual student level. In one review, 28,000 individual students were identified as ‘at risk’ of falling behind in their literacy, prompting the creation of a “catch up” program. Using this data, a target of 95 percent functional literacy for all 6th grade students was set, and three years ahead of schedule it had been exceeded, with a 97 percent literacy rate achieved.⁶¹

Reviewing the delivery agenda

Alongside monthly notes and regular stock takes, it’s necessary periodically to review the program as a whole.

Najib Razak, the prime minister of Malaysia, favors an annual review. This is in addition to a stocktake meeting each Monday to focus on one of his six priorities. To help ensure that a diverse range of views are fed in to the annual review, an International Advisory Committee was established, with external experts from a range of organizations, including the World Bank.

In No. 10 Downing Street my team and I thoroughly reviewed the whole delivery agenda every six months using the Assessment Framework on each major target. The beauty of the framework was that it did not just set out what progress had been made, it also predicted whether a target would be met on time in the future.

The assessment framework enables the likelihood of delivery to be predicted

Likelihood of delivery

Department: _____

PSA Target: _____

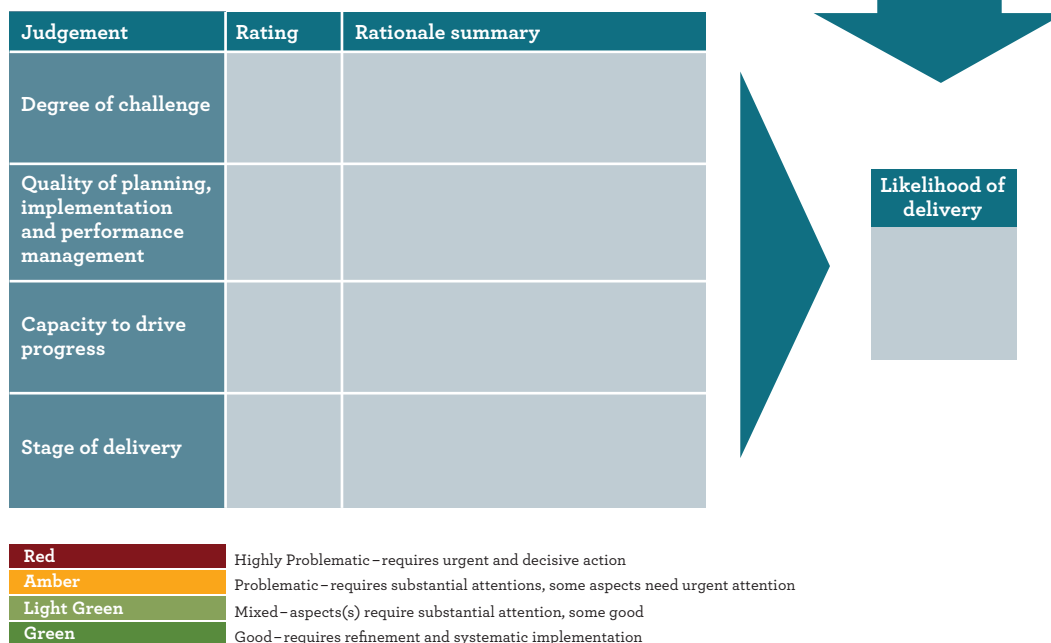


Figure 13: The Assessment Framework (Source: *Instruction to Deliver*, Barber 2007)

This enabled us to sharpen and refine plans for the six months ahead, and to learn lessons from the whole program that could be applied in future. The details of how to use the framework are set out in *Instruction to Deliver* (pp. x – xii).

The background of the page is a complex, abstract geometric pattern composed of numerous triangles in various shades of blue and teal. The triangles are of different sizes and orientations, creating a dynamic, low-poly aesthetic. The colors range from light, airy blues to deep, dark teals, with some areas appearing almost black. The overall effect is a textured, crystalline surface that changes as the viewer's perspective shifts.

Chapter 6

Problem-solving

Problems can be categorized by their intensity, and action taken accordingly.

Action needs to be taken swiftly, and excuses need to be taken off the table. Dealing with a major problem does not need to descend into crisis; often it just requires that the science of delivery be applied with greater intensity.

The UK PMDU developed four levels of intensity to categorize problems. The first level is a ‘timely nudge’, where a problem has been noticed, (such as this month’s data is off trajectory), or there may be a problem in one locality, and relatively straightforward solutions are available.

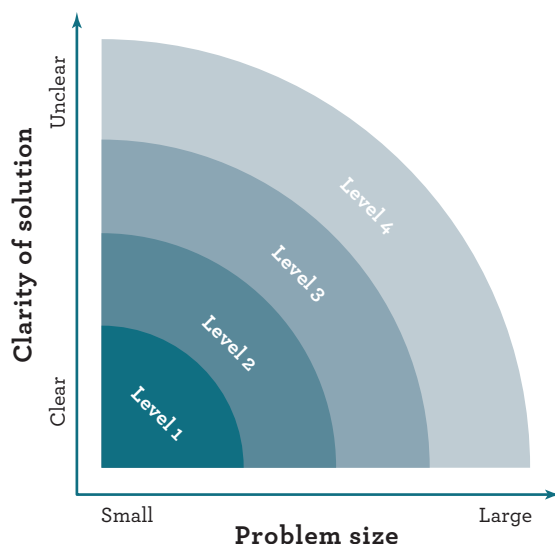


Figure 14: Categorization of problems and solutions

The second level of intensity occurs where a problem is significantly affecting delivery, but the cause and solution are not obvious. It’s called Standard Problem-Solving. There is a tendency in bureaucracies at moments like this is to wait and see what happens. This is a mistake. Act with rigor, investigate the cause of the problem, and search for solutions.

The third level, known as Intensive Problem-Solving, involves greater political and leadership input from a senior minister, or whoever leads on delivery.

Level 4 is Crisis Management. At this stage delivery is seriously threatened, and there is widespread criticism in the press and amongst the public. Once you have diagnosed the problem, you need to act. In a crisis, you have to act fast and drive hard. At Level 2 or 3, you may have more time to analyze the problem. What you don’t have time for, ever, is a major inquiry or the commissioning of an independent review. Although these reviews are often worthwhile as a way of understanding what happened and learning for the future, they are not fast enough as a management tool for those leading delivery.

The PMDU developed tools to help solve problems. The most important was the Priority Review, which incorporated another tool, Delivery Chain Analysis. The Priority Review can be undertaken in a month. The first week involves a team of four or five people typically comprised of staff from the Delivery

Unit, someone from the relevant department, and one or two people from the frontline of the service. The team needs to pull together all relevant data on the issue to arrive at a hypothesis for what the cause of the problem might be. At the same time the team devises a list of field visits, so that by weeks three and four the team can get out and speak to everyone in the delivery chain. Through the fieldwork, the team rapidly gains insight into where the problems are, and whether they are logistical or human.

The diagram below usefully summarizes how to think about problem-solving.

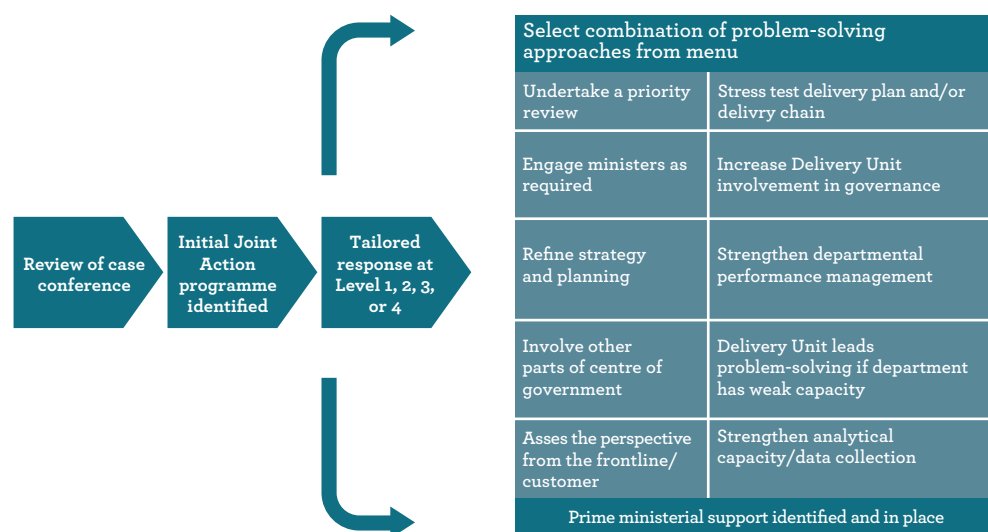


Figure 15: Problem-solving approach (Source: *How to Run a Government*, p. 202)

The Jordan Education Initiative used approaches akin to those at Level 2 and 3. Its central Project Management Office undertook site visits and conducted surveys to identify issues and allocate assistance where required.⁶² The vital gain from using a proven tool such as a Priority Review is that you can be sure it will be thorough, while also rapid and effective.

Take excuses off the table

Both within our own lives, and in bureaucracies, there will be problems that need solving but that we do not want to confront. The role of a delivery unit is to recognize excuses as you hear them, and to discard them. Here is a short guide to recognizing and countering the most common excuses.

- **Excuse 1: We are already doing it**
 - **Response:** How come we have a problem then? If you are already doing what is needed, where's the evidence it's working? Are you doing it with enough intensity? Maybe you're doing whatever it is on paper in the department, but it's not biting out there in the system.

- **Excuse 2:** You are asking the impossible.
 - **Response:** It may look impossible to you, but they’ve done it before in France/the US/China (delete as appropriate). If the other 90 percent of your system performed as well as the top ten percent you’d exceed what I’m asking. You just need a little bit of courage. Three departments last year told us the same thing and now look, they’re flying!
- **Excuse 3:** It is impossible and we are already doing it.
 - **Response:** I’ve heard this combination of excuses 1 and 2 more than once from the mouths of officials. The response is that they cannot both be true – get real!
- **Excuse 4:** It’s very risky
 - **Response:** Agreed, but not as risky as doing nothing. And if this does not work we’ll try something else.
- **Excuse 5:** There will be unintended consequences
 - **Response:** Of course, there always are. Some of them might be positive, incidentally, but either way we will check. The inevitable consequences of not acting look a good deal worse.
- **Excuse 6:** By intervening you are distracting us from delivering
 - **Response:** If you were delivering, we would not be intervening! We will help you deliver once it is clear what the problem is, but understand we are not going away until the problem is solved...at which point we will want to congratulate you.

To assist with difficult and complex conversations, the Jordan Education Initiative’s Project Management Office was deliberately not based within a government ministry or within a private sector organization. It was therefore perceived as neutral, enabling it to effectively interface with different partners and to broker sensitive discussions.⁶³

Chapter 7

Irreversibility

Having worked through the previous chapters and mastered the science of delivery, the aspiration must surely be for the change to become irreversible and institutionalized. This means not being satisfied merely with improvement in outcomes, but asking whether the leadership, structures and cultures are in place that will guarantee the right trajectory of results for the foreseeable future.

Sustained, disciplined political leadership

Excellent leadership is required to drive profound change. Drawing heavily on an excellent speech from Dalton McGuinty, the successful “education” premier in Ontario between 2003 and 2013, it is possible to derive some key lessons for education system leaders:⁶⁴

- **Lesson 1:** The drive to make progress cannot be a fad. It must be an enduring government priority backed by resources and an intelligent plan.
- **Lesson 2:** A reform is not important to your government unless it is important to the head of your government — personally.
- **Lesson 3:** It does not matter how much money you invest, it does not matter how much you want change. You will not get results unless you engage the workforce.
- **Lesson 4:** To succeed, you need to build capacity among staff and to empower the right people in the right way.
- **Lesson 5:** Settle on a few priorities and pursue them relentlessly.
- **Lesson 6:** Once you start making progress, you have permission to invest more.
- **Lesson 7:** The job is never complete.
- **Lesson 8:** The best way to sustain your effort to improve is to keep it personal. You yourself, as a leader, have to care.

An example of clear leadership from the top was seen in Jordan. The king personally, and persistently, gave emphasis to the importance of the education reform initiatives. This helped attract external partners, and helped to embed and drive change.⁶⁵ Political advocacy and drive were found to be the decisive factors for the INJAZ program, the entrepreneurial training program in secondary schools. The early support provided by Her Majesty Queen Rania helped build the program’s credibility and provided access to a wide network. Additionally, government support from the Ministry of Education was crucial in scaling the program in schools.⁶⁶ INJAZ has been recognized by UNICEF as a model of best practice in youth and adolescent engagement in the Middle East and North Africa (MENA) region.⁶⁷

Embedding change

Central to irreversibility is investing in the continuous learning of the workforce. This has three aspects to it, when it's done well. The first is awareness raising: ensuring that the people involved in delivering a major change, such as government officials and teachers, for example, are aware of what is coming, why it is coming, and what it's likely to mean in practical terms. Ideally, everyone understands the moral purpose as well as the rationale. The purpose must be convincing in the sense that people need to believe it really is going to happen. To ensure it is convincing, and that it reaches all those who need to know, it's necessary to use multiple communication channels, not just the management cascade which is notoriously inefficient on its own.

The second level is *formal training* that may apply to specific segments or the entire workforce and provides the skills necessary to adopt whatever the change may be. The third level of capacity-building is to embed it in the way the system operates. This is crucial to irreversibility. It's also fundamental to unleashing greatness. The best way for a teacher to follow through in practice on the learning related to a major change is to learn from his or her peers in context, rather than at a training center.

The role of the head teacher has been cited as a key driver in leading change. For example, in Ho Chi Minh City, London and New York, the head teacher was identified as the instructional leader whose core role was to monitor and improve the teaching, not the administration. For these reasons, training and development for head teachers is a good investment and developing school leaders collectively as well as individually can help secure irreversible change. Examples include the work of the National College for School Leadership in England, and the establishment of a leadership training institute in New York. Vietnam has two national institutes for educational leaders. The investment in leadership capacity appears to pay off. In London, for example, where this was a special focus, school leaders were judged by the national school inspectors to be more effective than school leaders in every other region of England. As the diagram below shows, the impact is particularly wide between the percentage of leaders judged Outstanding—the top grade possible—in London compared to England overall.⁶⁹ In part for this reason, London has become the best performing region in the country.

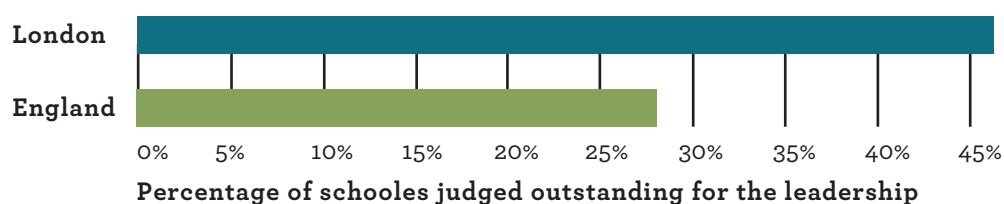


Figure 16: Percentage of schools graded outstanding for their quality of leadership in London and in all England (Source: Education Development Trust 2015)⁶⁹

Continuous skill and capability building

There is a need for continuous skill and capability building. An organization that excels at this kind of training is BRAC, the Bangladeshi non-governmental organization. They embed continuous learning in all their major programs, whether it's chicken farming, women's empowerment or education. As part of their education program, BRAC educates ten percent or more of the primary-age children in Bangladesh. Almost all of their pupils have for one reason or another dropped out of the (very poor) government system. BRAC takes these children through to completion of primary school in four years instead of the five allowed in the government sector. In spite of spending a year less, the BRAC children massively outperform the children in the government sector. This is partly because BRAC has a well-worked-out model of good primary education, but above all it's because they train their teachers to be excellent. Almost all BRAC primary schools are one-room schoolhouses with 30 to 40 children and just one teacher, which makes their success all the more impressive.

Furthermore, the teachers involved with BRAC are almost always young women from the local community who have just graduated from high school. These young women receive no more than three or four weeks of training before they start teaching. That is enough to get them going, but what brings about the quality, and the remarkable consistency from one school to another, is the fact that these teachers are visited weekly by a trained coach who watches them in action and offers specific advice. These coaches were previously BRAC teachers, this means they can demonstrate with the children the point they want to make. Then, once a month, the teachers meet in a cluster of a dozen or so at a nearby training center, and spend a day learning specific new skills, both from the trainer and from each other. For these training sessions, they sit on the floor with a pile of materials in front of them just as the children do in their classes. To put it in technical language, the training itself models the pedagogy required in the classroom. You can visit one school after another and find the BRAC model being delivered again and again by teachers who most often work alone.

The professionalization of the workforce, including attracting bright talent, has been a key element in many education reforms. For instance, in Ho Chi Minh City, Vietnam, there has been a concerted effort to improve the qualification level of teachers. In New York, the entry requirements for teachers were raised, and there was a marked improvement in young people in the top third of the pre-university aptitude test wanting to become teachers. In London, the Teach First program, introduced in 2002, attracts high performing graduates from top universities into disadvantaged government schools. The program has helped change the perception of the teaching profession as a high-status option for talented graduates.⁷⁰

Chapter 8

Money & Resources

Money matters. Yet there is a paradox: as we saw in Chapter 1, increased spending does not necessarily lead to improved outcomes. In the current economic climate, it's not realistic to assume that spending can continue to increase year after year. In the next decade, many governments face a triple bind which will impact their education systems:

1. A debt burden which needs to be reduced.
2. Growing demand for improved quality of education.
3. Downward pressure on the ability to raise taxes.

The challenge governments face, therefore, is productivity.

In general, Arab governments have allocated a significant portion of their national income to education; Djibouti, Tunisia, Morocco, Saudi Arabia, and Yemen each spend more than five percent of their gross national product on education.⁷¹ This has led to significant progress toward universal access to school, yet there has been very low return on investment in terms of meaningful educational outcomes. Across the region, education systems are hindered by low quality and inequity.⁷²

The 2016 PISA scores revealed that countries across MENA are generally well below the OECD average in mathematics, reading and science.⁷³ In terms of the TIMSS scores, the lowest performers in MENA were Jordan, Saudi Arabia, Morocco, and Kuwait. In Lebanon, results for TIMSS Advanced, which assesses students in their final years of secondary schools, revealed no improvement since 1995. The World Bank states that “the reasons why [there is poor performance] are complex, but deserve unpacking”.⁷⁴

The reasons why extra resources often don't translate into outcomes for students are numerous. The two most important are: governments too often think that putting money in will make a difference on its own (but as chapter 3 argues this is not the case); and governments ignore the evidence in the design of reform.

A bold, clean slate approach to budgeting

In *The Price of Government: Getting the Results We Need in an Age of Permanent Fiscal Crisis*, David Osborne and Peter Hutchinson set out five key challenges that should be addressed when developing a budget.⁷⁵

1. Get a grip on the problem: is it about income, borrowing or spending, or a combination of all three?
2. Set the price of government: how much does the government want to spend, and how much are citizens willing to pay?

3. Set the priorities of government: where should energy and investment be focused?
4. Allocate available resources across the priorities: money should be reallocated from lower to higher priorities.
5. Develop a purchasing plan for each result: this is the most radical part of the model. Once the allocations are decided, instead of simply passing the funding on to a relevant existing service, it is proposed that a ‘Results Team’ develops a purchasing plan for each priority area. This team is empowered to ‘be like citizens’ and to clearly state what is and is not working, and to produce a delivery plan for each major outcome.

Public sector productivity

Harvard professor Mark H. Moore developed a framework to help increase public value produced by government.⁷⁶ Drawing on this approach, and tailoring it so that it becomes operational, I developed the diagram below to outline a framework for productivity reviews.

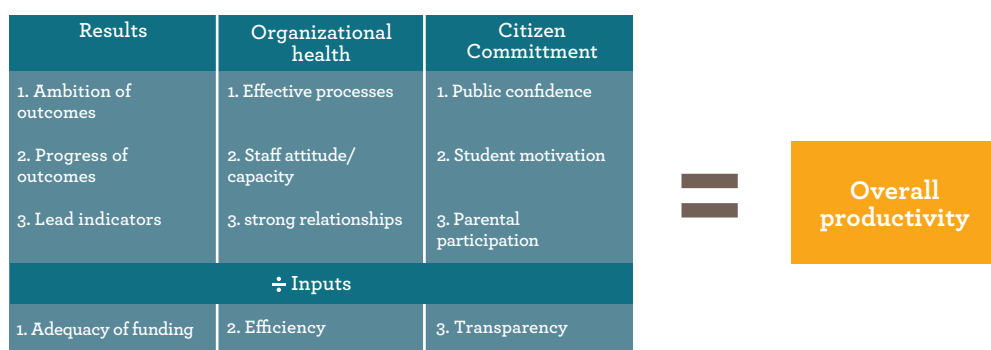


Figure 17: Framework for productivity reviews (Source: How to Run a Government, p. 269)

The first part of the review examines the results or outcomes. The second part measures the attitudes of citizens, students and parents. In education, if students are motivated and parents actively supportive, then that will affect the academic outcomes positively. The third part of the framework ensures that those who have stewardship of the system think not just about the results now, but also in the longer term results while anticipating and managing change over time. The fourth part of the framework examines inputs, such as the cost of staff time. This data is usually available in government systems around the world, but it’s often poorly presented and not always used systematically.

While this cannot be turned into a mathematical equation, it can ensure governments ask themselves the right questions about the investments they make and the impacts they have.

Leveraging external funding

The education reforms in New York City have been greatly helped by the Office of Strategic Partnership. Its role is to secure funding and support from business, philanthropy, and not-for-profit groups, helping create public-private partnerships. Examples include a \$15 million (USD) grant from the Wallace-Reader's Digest Fund to support the principals' Leadership Academy, and more than \$40 million from several large donors to fund the Center for Charter Excellence, a not-for-profit established to support charter schools.⁷⁷

Long term financing and technical support are essential components for successfully scaling reform efforts. For the INJAZ program, the long-term commitment of USAID allowed the skills building program to establish and grow. The program also benefitted from USAID's auditing system, from which INJAZ built its own system.⁷⁸

When it comes to attracting money, the issues in the Middle East region and the impact this has on partnering cannot be underestimated. In Yemen, the Secondary Education Development and Girls Access Project (SEDGAP), which aimed to improve the gender equity and quality of secondary education, was originally co-financed by five development partners. The upheaval in 2010 resulted in some partners withdrawing their support or reducing their contributions, consequently the project funds dropped from \$103.4 million to \$47.2 million. Despite less money, the Ministry of Education strove to deliver the program.⁷⁹ The key with all externally provided funding is to ensure it's invested strategically in the overall approach to delivery rather than to fund separate initiatives.



Concluding Comments

As we argued in the introduction there is a huge challenge facing the world’s education systems and an urgent need to reform them effectively. What the economy and society of the twenty-first century demand from school systems is radically different, and of a much higher quality than the demands made by the twentieth century.

In this sense, even the best school systems in the world are not yet ready; the worst are dangerously adrift from where they need to be. In the Middle East and North Africa, for example, there is a rapidly growing youth population whose preparation for the twenty-first century is generally inadequate, and the situation, unless radically and urgently changed, risks preventing millions of individuals from leading fulfilled lives while simultaneously posing a grave threat to the success of those societies.

As argued in the introduction, reforms need three elements to succeed:

1. **Whole system reform** — evidence-based, coherent and based on the stage of development the system has reached, and the policy steps most likely to accelerate it forward. What will not work is a random “portfolio of initiatives”.
2. **Systemic innovation** — a series of experiments (built into the way the system works and learning from the rest of the world) designed to inform future developments in the system. Areas such as Ed Tech and AI are examples. (The diagram below summarizes the key elements of getting this right).
3. **A systematic approach to delivery** — the focus of this document. In many reforms this aspect is neglected but without getting it right the other two elements will remain on paper and not make the difference for students and families they are intended to make. If this happens, cynicism is inevitable and everyone loses confidence in the capacity of the system to reform itself.

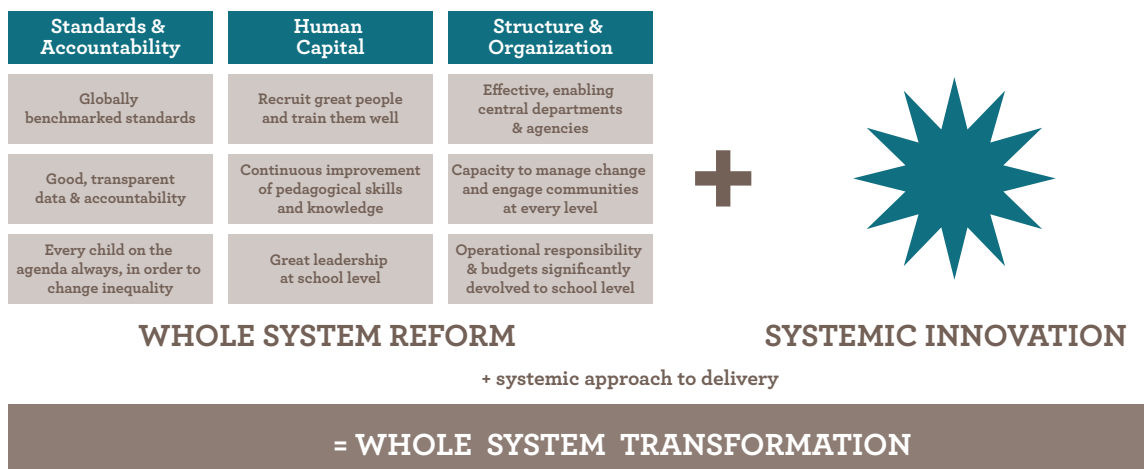


Figure 18: Whole system transformation (Source: Barber, Donnelly & Rizvi, 2012)⁸⁰

The third element of these three has been the focus throughout this document. The other elements are explored in depth in *Oceans of Innovation*.⁸¹

The overall challenges are summarized below.

Challenges facing reformers

- Entrenched interests
- A history of defeat
- Tired debates
- A lack of courage
- A lack of imagination
- False dichotomies

The elements of transformation are also clear

System level

- Increased priority
- Knowledge of what effective systems look like
- Understanding the building blocks of reform
- Advances in technological capability
- Advances in system-wide assessment
- Ever better data

School and student level

- Great school leadership
- Deep knowledge of school improvement
- Understanding of effective teaching and learning
- Online and blended learning
- More sophisticated assessment
- The growth mindset

Application of Deliverology

- As summarized throughout this paper

To advance all three aspects requires a further ingredient; political leadership requires above all, courage. Too often this is lacking, but without it the elements of reform, summarized in the diagram above, can't be put in place.

Conceptually, getting education reform right is not all that sophisticated. The biggest challenges by far are summoning the courage to take on the status quo, having a systematic approach to implementation that ensures barriers are overcome and problems are solved as they arise, and above all, ensuring persistence so that the reform is seen through and the benefits realized for students, their families and societies as a whole.

It would be a profound mistake to postpone the start of comprehensive reform any longer. The need is clear. The knowledge is there. The time is now.

Annex

Education in the Middle East

This section outlines the challenges and achievements in delivering education across the region, and the disparities between countries.

Much of the Middle East region, and some of North Africa, is in turmoil. Conflicts are causing untold damage to human life and infrastructure in Syria, Iraq, Libya and Yemen. According to the World Bank, 15 million people have fled their homes giving rise to the biggest refugee crisis since World War II.⁸² Meanwhile, even in countries at peace, the performance of school systems leaves a lot to be desired.

Achievements

Even within this context, there have been achievements. There has been huge progress in education across the Middle East and North Africa region. Since 1960, the average level of schooling has quadrupled, since 1980 illiteracy has halved, and almost complete gender parity for access to primary education has been achieved.⁸³

In most MENA countries, both girls and boys have access to primary education. Between 2000 and 2010, net enrollment rates (NER) rose from 86 to 94 percent. Secondary enrollment also increased during the same period, from 62 to 70 percent.⁸⁴

Literacy rates have dramatically improved in the past 20 years, rising from 59 per cent in 1990, to 78 per cent in 2010.⁸⁵

An interesting trend in the region is the gender gap (which mirrors that in other regions of the world) with girls outperforming boys in Grade 4 in mathematics performance, and generally continuing to do so into Grade 8.⁸⁶

There is strong government commitment to public education; in 2014, an average of 5.3 percent of GDP was spent on education across the MENA region.⁸⁷

Challenges

The World Bank notes that “these impressive achievements are marred by an uncomfortable fact: for too many students across the region, schooling has not been synonymous with learning”.⁸⁸

Access to education is patchy. Across the Arab world, nearly 4.5 million children are not in school, and of these, 87 per cent are in conflict-affected countries. Another 2.9 million young people do not have access to secondary schools.⁸⁹

In general, schools in MENA are of low quality. International standardized tests reveal that the region is not at the expected level, particularly given MENA countries’ per capita incomes.⁹⁰ The 2016 PISA scores show that countries across the region remain below the OECD average in reading, mathematics and science. In Lebanon, there has been no improvement in students in their final year of school since 1995.⁹¹ The 2013 Gallup World Poll,

which covered citizens and Arabic speaking residents across countries, found on average almost 40 percent of respondents were dissatisfied with their country's education services. Those who saw their education services more favorably were respondents in Bahrain, Oman, Qatar, and the United Arab Emirates, whilst most citizens in Egypt, Iraq, Morocco, and in Yemen were dissatisfied.⁹²

There is a skills mismatch between those skills taught in school and the requirements of the labor market. Firms in MENA claim that inadequate technical and soft skills amongst the labor force impede their growth and ability to hire employees.⁹³ A survey by PriceWaterhouseCoopers (PwC) showed that 60 percent of CEOs do not believe that education systems in the Middle East provide students with the right skills for employment.⁹⁴

The limited employment prospects, even for educated youth, were highlighted as an issue during the Arab Spring. In 2013, youth unemployment across MENA was 14 percent, double the world average.⁹⁵ In some areas it is even more severe. For instance, youth unemployment ranged from between 30 and 43 per cent in Egypt, Palestine and Tunisia in 2011.⁹⁶

Following the Arab Spring, there are growing demands for more responsive and accountable public services. According to the World Bank, many are focusing directly on education, which means there are calls for schools and teachers to become more accountable for the outcomes of student learning.⁹⁷ Arguably, greater accountability is as much an opportunity as it is a threat.

Addressing the education needs of school age refugees is an immediate challenge for the region. The UN predicts that even if the crisis ended immediately, it would still take between eight and ten years for the refugees to return to Syria.⁹⁸ Education levels for registered Syrian refugees are generally low, with 80 percent of refugees in Lebanon and Jordan not holding more than primary education. Over two million of those displaced in Syria receive no formal education, and almost 50 percent of Syrian children in host countries are not enrolled in schools.⁹⁹

The Arab World Learning Barometer, published in 2014 by the Brookings Institution, brings together data from over 20 countries in the Arab region to provide a snapshot of the education system between 2001 and 2012. It finds that over half of all school children are not acquiring foundational skills at both primary and secondary level. The data shows that boys perform less well than girls, with girls having a higher learning level than boys in almost every country in the region with available data.¹⁰⁰

The science of delivery

These issues indicate that there is a need for the application of the ‘science of delivery’ in MENA. The science of delivery sees the world from inside government looking out and is:

- Valuable whether you want a smaller or larger state
- Either top-down or bottom-up, or something in between, according to choice
- A disciplined process rather than a policy prescription
- An important ingredient in the future of accountable government

Analysis of the issues and challenges in MENA suggests that identifying policy reform needs to correspond with how it will be implemented. As part of this, it’s hoped that the science of delivery will explore issues by “looking at the nature of a problem and developing a hypothesis while being agnostic about the solution; by using evidence to inform the implementation of solutions; by taking an adaptable, creative, and context-driven approach; and by being able to capture cumulative knowledge when finding and fitting local solutions”.¹⁰¹

Many elements need to come together to solve the world’s huge education challenges and to dramatically improve school systems. No strategy or policy can be effective unless it is combined with a systematic, sustained approach to delivery.

About the Author

Sir Michael Barber is Chairman and founder of Delivery Associates and author of *How To Run a Government* (Penguin, 2016) and co-author of *How the world's best performing school systems come out on top* (McKinsey, 2007), *Oceans of Innovation* (IPPR, 2012) and *The Good News from Pakistan* (Reform, 2013). He has worked on government or education reform in more than fifty countries.

About WISE



world innovation summit for education

مؤتمر القمة العالمي للابتكار في التعليم

An Initiative of Qatar Foundation

The World Innovation Summit for Education was established by Qatar Foundation in 2009 under the leadership of its Chairperson, Her Highness Sheikha Moza bint Nasser. WISE is an international, multi-sectoral platform for creative, evidence-based thinking, debate, and purposeful action toward building the future of education. Through the biennial summit, collaborative research and a range of on-going programs, WISE is a global reference in new approaches to education.

The WISE Research series, produced in collaboration with experts from around the world, addresses key education issues that are globally relevant and reflect the priorities of the Qatar National Research Strategy. Presenting the latest knowledge, these comprehensive reports examine a range of education challenges faced in diverse contexts around the globe, offering action-oriented recommendations and policy guidance for all education stakeholders. Past WISE Research publications have addressed issues of access, quality, financing, teacher training, school systems leadership, education in conflict areas, entrepreneurship, early-childhood education, and twenty-first century skills.

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Disclaimer

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