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# Deliberate Disrupters

## Can Delivery Approaches Deliver Better Education Outcomes?

DeliverEd Final Report

June, 2023

# DeliverEd: Building knowledge on how to use delivery approaches to advance education reforms

The DeliverEd Initiative was launched in 2019 to strengthen the evidence base for the ways governments can achieve their policy priorities through delivery units and other delivery approaches. Globally, more than 80 countries have used such approaches to achieve better outcomes for policy reform and implementation. Forty-seven percent of the delivery approaches include education, either as a single-sector or as part of a multisector approach. However, there has been little empirical evidence, especially from developing countries, on the effectiveness of delivery approaches in delivering education outcomes or on the design choices, contextual features, and enabling factors that contribute to the performance of these delivery approaches.

DeliverEd helps to fill this evidence gap and create a better understanding of the practices leaders can adopt to improve their policy delivery and reform efforts. DeliverEd has conducted research within and across countries on the effectiveness of delivery approaches in improving reform implementation, and this report builds on the key findings. DeliverEd has facilitated the sharing of knowledge and experience among countries—for example, through the Africa Policy Forum—to equip policymakers with a deeper understanding of delivery challenges and solutions to make informed decisions. DeliverEd also continues to increase awareness and the uptake of research to improve schooling and learning in low-income countries.

The Education Commission leads DeliverEd with Oxford University's Blavatnik School of Government (BSG) and funding from the UK Foreign, Commonwealth & Development Office (FCDO). Other partners include the University of Toronto, the Institute for Educational Planning and Administration (IEPA, under the auspices of UNESCO), the University of Cape Coast in Ghana, the Institute of Development and Economic Alternatives (IDEAS) in Pakistan, the World Bank, and Georgetown University in the United States. For more information about DeliverEd, and to view the country studies and other related research and policy engagement materials, please visit [www.educationcommission.org/delivered-initiative](http://www.educationcommission.org/delivered-initiative).

We are very grateful to the Blavatnik School of Government and to all of our research partners for their in-depth research, especially during the COVID-19 pandemic. This DeliverEd Final Report is the Education Commission's interpretation of the research. For the detailed research papers, please see the links on the next page and the bibliography for full references.



## DeliverEd Research Products

Anderson, K., Ibarra, A., & Javaid, N. (December 2022). [The Education Commission. A Case Study of the Sierra Leone Delivery Unit](#). DeliverEd Initiative Policy Note.

Bell, S., Asim, M., Mundy, K., Pius Nuzdor, H., Boakye-Yiadom, M., & Mensah Adosi, C. (May 2023). How do regions, districts and schools respond to the introduction of a delivery approach: Evidence from Ghana. DeliverEd Initiative Working Paper.

Bell, S., Leaver, C., Mansoor, Z., Mundy, K., Qarout, D., & Williams, M. (March 2023). [The Role of Delivery Approaches in Education Systems Reform: Evidence from a Multi-Country Study](#). DeliverEd Initiative Working Paper.

Boakye-Yiadom, M., Leaver C., Mansoor, Z., & Iocco, MP. (March 2023). [Management and performance in mid-level bureaucracies: Evidence from Ghanaian education districts](#). DeliverEd Initiative Working Paper.

Gulzar, S., Ladino, JF., Mehmood, MZ., & Rogger, D. (March 2023). [Command and Can't Control: An Evaluation of Centralized Accountability in the Public Sector](#). DeliverEd Initiative Working Paper.

Malik, R. & Bari, F. (May 2023). [Improving Service Delivery via Top-Down Data-Driven Accountability: Reform Enactment of the Education Road Map in Pakistan](#). DeliverEd Initiative Working Paper.

Mansoor, Z., Qarout, D., Anderson, K., Carano, C., Yecaló-Teclé, L., Dvorakova, V., & Williams, M. (July 2021). [A Global Mapping of Delivery Approaches](#). DeliverEd Initiative Working Paper.

Qarout, D. (November 2022). [The Accountability Paradox: Delivery Units in Jordan's Education Sector 2010–2019](#). DeliverEd Initiative Working Paper.

Williams, M., Leaver, C., Mundy, K., Mansoor, Z., Qarout, D., Asim, M., Bell, S., & Bilous, A. (April 2021). [Delivery Approaches to Improving Policy Implementation: A Conceptual Framework](#). DeliverEd Initiative Working Paper.

## DeliverEd Policy Products

Anderson, K., & Bergmann, J. (2022). [The Education Commission. Design Choices for Delivery Approaches in Education](#), DeliverEd Initiative Policy Brief.

Anderson, K., & Carano, C. (2021). [The Education Commission. The Challenge of Delivering for Learning](#), DeliverEd Initiative Policy Brief.

Villaseñor, P. The Education Commission. (2021) [Delivery Approaches in Crisis or Conflict Situations](#), DeliverEd Initiative Policy Brief.

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# Foreword

In a world undergoing rapid transformation, education stands as a cornerstone of progress, a catalyst for change that empowers individuals and societies alike. Yet the COVID-19 pandemic exacerbated an already deep learning crisis and imposed new fiscal constraints on education systems. It is now increasingly imperative to critically examine our approaches to delivering education and classroom learning effectively. Governments around the world are striving to improve learning outcomes and are not short of good policies, but they often lack evidence-based strategies for effectively implementing reforms.

Many governments globally have adopted education delivery approaches or units to address their country’s learning crisis. DeliverEd has identified more than 150 delivery approaches in 80 countries, with the majority of these delivery approaches including education. However, little evidence has existed about their effectiveness, when and where they have proved useful, and what they have achieved. In response, DeliverEd initiated research in 2019, in collaboration with the Blavatnik School of Government (BSG) at Oxford University, centered around five delivery approaches in Ghana, Pakistan, Jordan, Sierra Leone and Tanzania to help build evidence on the effectiveness of these initiatives.

It is with great pleasure that we present DeliverEd’s final report as the culmination of this research effort. Drawing upon the research conducted by DeliverEd’s country teams and BSG, this report summarizes the effectiveness of delivery approaches and proposes a simple, three-part framework to help political leaders, policymakers, and practitioners plan, design, evaluate, and operate delivery approaches more effectively.

The report’s “launching-learning-sustaining and scaling” framework is developed around the notion of launching a delivery approach based on country context and with solid political support, a good design that focuses on student learning, data that helps evaluate effectiveness, and communication that helps build ongoing support. The framework emphasizes learning continuously from the operation of the delivery approach and adapting it based on data, evidence, and problem-solving at all levels, not just at the top. The framework also highlights the importance of sustaining and scaling up what is working to improve student learning and build political and popular support for education system reforms. This process of launching, learning, sustaining, and scaling a delivery approach should be iterative, with each element supporting the others in what should become a virtuous circle that improves classroom learning.

We believe that this report will serve as a valuable resource to guide the efforts of policymakers, donors, and practitioners in enhancing learning through the evidence-based implementation of reforms. The report reminds us that our ultimate focus should be on the learners and their progress, with every decision we take and every policy we implement guided by this goal.

We extend our heartfelt appreciation to the field personnel, researchers, and experts whose dedication, analysis, and insights have made this report possible. It is our sincere hope that this DeliverEd final report will serve as a catalyst for change, sparking meaningful discussions, further research, and government action on how best to implement education system reforms that produce student learning and foundational skills for all children.

## DeliverEd Co-chairs

**Baela Jamil**



**Amel Karboul**



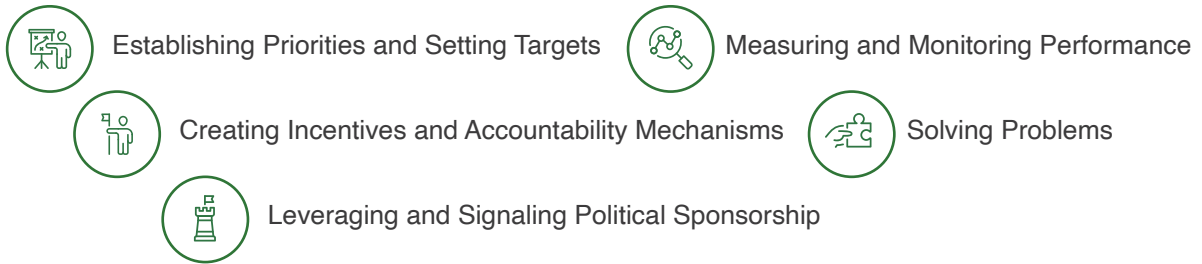
**Albert Nsengiyumva**



# Key Messages

Delivery approaches, one type of large-scale management reform to improve policy implementation, have proliferated across more than 80 countries and remained popular among country leaders and donors, with almost half of the delivery approaches including the education sector.<sup>1</sup> It is important to understand both their successes and failures and to consider how delivery approaches - as one of many policy implementation tools - can deliver better educational outcomes for a world aiming to address the global learning crisis.

## DeliverEd identifies five core functions that delivery approaches use to achieve their goals:<sup>2</sup>



## DeliverEd has conducted research on the effectiveness of delivery approaches in improving reform implementation

This report builds on the DeliverEd research in Ghana, Pakistan, Jordan, Sierra Leone and Tanzania that sheds some light on the effectiveness of delivery approaches for improving policy implementation.<sup>3</sup>

### **This evidence shows that Delivery approaches are more effective at:**

Leveraging political and bureaucratic sponsorship to shift attention toward key national priorities and results.

Clarifying roles and responsibilities and improving coordination and alignment among national agencies and donors.

Achieving input and process targets at the central level including unclogging legal, structural, procurement, funding, and legislation bottlenecks.

Packaging and strengthening data and linking it to indicators and targets to make monitoring and reporting easier, particularly at the central level.

Introducing top-down accountability and incentives, both rewards and sanctions, which are usually high-stakes and linked to performance.

## Delivery approaches are less effective at:

Prioritizing solutions and changing behaviors among downstream actors to bring about change in schools. Delivery approaches hardly ever build middle-tier capacity or address local constraints to ensure implementation at the school level.

Ensuring strong linkages between intermediate (process) targets and the ultimate goals of improving learning outcomes.

Using data to drive analysis, problem-solving, organizational learning, and adaptation at all levels, particularly at the subnational, middle-tier, and school levels. Delivery approaches tend not to encourage bottom-up feedback loops.

Mainstreaming accountability and understanding and addressing its negative or unintended consequences.

Ensuring enduring changes in managerial knowledge, behavior, and norms after political changes or the end of donor support.

## DeliverEd Policy Framework

This report puts forward a simple framework that policymakers, officials, and donors can use to launch, learn and adapt, and sustain and scale up (LLSS) delivery approaches to improve student learning.

The framework is built around harnessing and adapting delivery approaches to launch reforms well with strong leadership and a clear focus on student learning, to learn and adapt delivery approaches based on data, evidence, and problem-solving, and as implementation proceeds, to sustain what is working through building capacity, embedding routines and creating a culture so that the reforms can be scaled up with growing political and popular support. Launching, learning, and sustaining and scaling are core elements of an iterative process with each element supporting the other. The messages from the LLSS framework may have relevance to other efforts to improve reform implementation and public sector management at multiple levels within the education system.





# Introduction

Delivery approaches for education hold great political appeal. Assemble a capable team of local and international experts under the championing wing of a president, prime minister, or education minister. Give the delivery team adequate resources to fulfill its vision and mission for reform. Unleash the power of its position of influence to ask more of the bureaucracy and to shift the focus from inputs and processes to results. Presto, education officials, frontline managers, and teachers start doing what they are supposed to do as they pursue established priorities and reach new targets. This is the expectation that has drawn policymakers across the world to delivery approaches.

Do delivery approaches live up to this expectation, and are they a useful approach to improve learning outcomes? Consider the success of British Prime Minister Tony Blair's delivery unit, set up with great effect early in his second term in 2001 to track and ramp up the implementation of reform priorities for education, health, and other public services.<sup>4</sup> Blair's government had boosted the budgets for public services in his first term, but performance did not improve. The new delivery unit established in his second term quickly improved examination performance and reduced waiting times in clinics.<sup>5</sup>

Similarly, Malaysia's Performance Management and Delivery Unit (PEMANDU) was set up by the prime minister in 2009 to improve public services, and the subsequent Education Performance and Delivery Unit (PADU) was created to work with PEMANDU and push the Ministry of Education bureaucracy to improve learning outcomes.<sup>6</sup> PADU supported the implementation of the Literacy and Numeracy Screening program, which contributed to improving the literacy and numeracy skills of young learners. The units were well-staffed, well-financed operations that had high-level support to jostle the bureaucracy and elevate reform efforts to new heights, thanks to some deliberate disruption. The delivery units flourished in countries with substantial resources and experienced government officials in senior leadership and on the frontline.

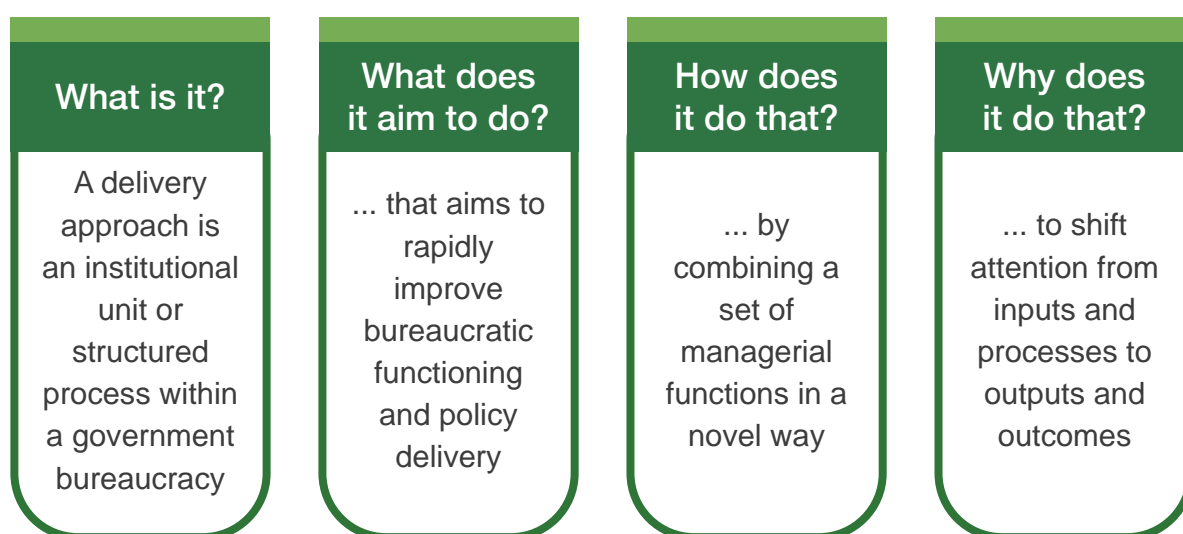
This report examines the education delivery approaches and units studied under the DeliverEd research initiative in Ghana, Pakistan, Jordan, Sierra Leone and Tanzania, the cross-country study summarizing the research, and several field notes from other countries. There was great variety in the approaches, and most were launched with considerable publicity in the media and in government. Almost all improved attention to national priorities through communication and coordination among various departments. Many approaches improved the collection, analysis, and dissemination of data. Some tried to cascade instructions from the top down to district officials, principals, and teachers, hoping to increase accountability through performance contracts. Some helped improve inputs and processes. However, the approaches mostly fell short in improving learning outcomes, with many not even measuring these outcomes. Even when some approaches appeared to be working, they remained vulnerable to being shut down when a new leader took over. Malaysia's widely heralded PEMANDU was dismantled by a new prime minister who was appointed in 2018.

Delivery approaches keep getting adopted, however, and they have proliferated around the world and remained popular with both country leadership and donors. Delivery approaches are appealing to prime ministers and education ministers since they are a way to demonstrate that politicians are taking action to accelerate reform implementation and results. It is therefore important to understand their successes and failures, and to consider how delivery approaches—as one form of policy implementation—can deliver better educational outcomes for a world wanting to address the global learning crisis.

# Delivery Approaches, Aims, and Functions

In the past 10 to 20 years, delivery units and other delivery approaches have been adopted worldwide to improve policy implementation or achieve high-level targets. Most delivery approaches introduce changes to catalyze and coordinate a set of management functions. They combine functions such as target-setting, monitoring, accountability, and problem-solving with the aim of rapidly improving bureaucratic performance and service delivery. They leverage political sponsorship to shift administrative focus to the achievement of key outputs and outcomes. They often create new organizational structures—delivery units—modeled at least in part on high-profile examples, such as the UK Prime Minister’s Delivery Unit and Malaysia’s PEMANDU Delivery Unit. Put simply, delivery approaches are a combination of often centrally-driven management changes that governments adopt to improve policy implementation.<sup>8</sup>

DeliverEd defines a delivery approach in the following way:



DeliverEd identifies five core functions that delivery approaches use to achieve their goals. Many of the functions are already the responsibilities of education bureaucracies, but they are often fragmented in silos that do not work with one another:



These functions are not unique to delivery approaches; indeed, they describe the core of what most bureaucracies do daily. However, a delivery approach seeks to improve performance by combining functions in unique ways or carrying them out differently and more effectively. For example, most ministries have annual plans that define targets, but a delivery approach might help focus on key targets, leverage political sponsorship to increase impact, establish high-frequency measurement of

performance, and set up performance reviews chaired by ministers or higher-level officials who hold functionaries below them accountable and give out rewards or penalties.

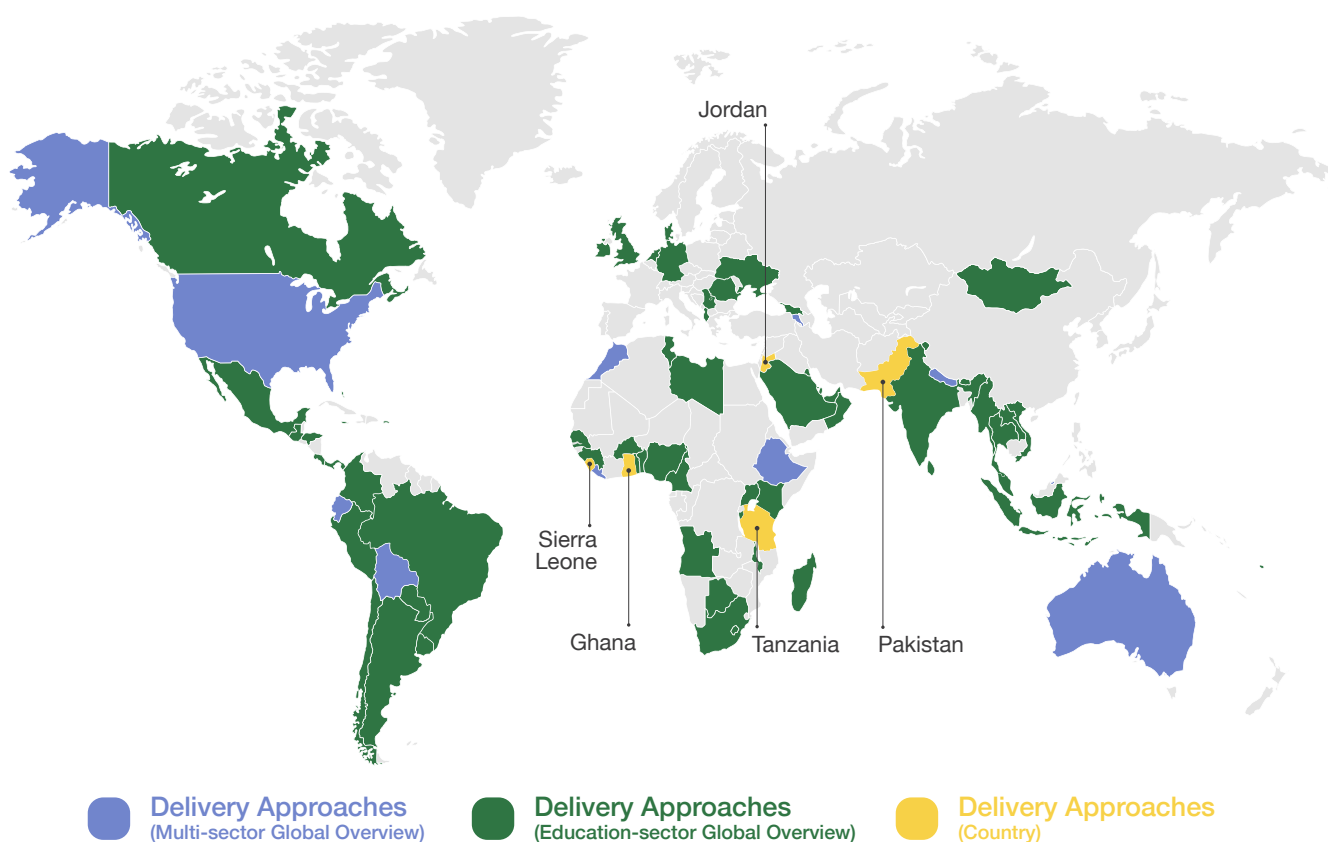
In some cases, a delivery approach may genuinely introduce new practices, such as high-stakes ambitious targets, new data collection, and more frequent stakeholder convenings. In other cases, a delivery approach may simply combine existing bureaucratic practices from throughout the bureaucracy into one unit, under the direct supervision of the minister.

The design of a delivery approach can be at or include different levels—national (president, prime minister, or other ministerial office), subnational (states, provinces, districts, or cities) and schools - or it can take different forms depending on the context and the goals. The different forms can include:

- **The existing bureaucracy:** using existing structures or posts within the bureaucracy to execute the key functions of the delivery approach.
- **A reorganized bureaucracy:** reorganization or reshuffling of the bureaucracy within pre-existing structures.
- **A new or parallel unit:** often staffed with consultants, specifically to achieve the goals of the delivery approach.

## Delivery Approaches Around The World

DeliverEd’s 2021 global mapping exercise showed that 67 delivery units of the 142 units mapped included the education sector. Of these, 19 were focused on education alone, and the rest were multisectoral.<sup>10</sup>



Source: A Global Mapping of Delivery Approaches | the Education Commission

Delivery approaches implemented in five countries were thoroughly researched as part of DeliverEd’s work, and these approaches are described below as in the cross-country analysis. Key country research findings are interwoven throughout the report.<sup>11</sup>



# Summary of delivery approaches used in the countries studied



## Ghana

Ghana's National Education Reform Secretariat (NERS) established in 2019 in the Ministry of Education, with funding from the UK Foreign, Commonwealth & Development Office supports the implementation of Ghana's 2018–2030 Education Strategic Plan and its three priorities for access, quality, and system management. Led by a retired senior education official and staffed with nationally recruited implementation specialists, the staff at the delivery unit reports directly to the minister. Initially it focused on national goals and targets related to the delivery and coordination of core functions across the agencies that administer Ghana's education sector. Annual performance contracts were signed between the “big six” agency heads who owned the reforms and the education minister, and they were later expanded to all 17 education agency heads. In 2021, the new education minister shifted the focus of the reforms to the subnational level, to regions, districts, and schools. The priority now is coordinating the NERS with the Ghana Education Service (GES), the entity responsible for subnational education policy implementation.



## Pakistan

In Pakistan's Punjab province, an education roadmap and a delivery approach to support its implementation was introduced in 2012 and operated until 2018 under the leadership of the chief minister of Punjab, the highest political authority at the provincial level. In the beginning, the approach focused on school enrollment, teacher attendance, and school infrastructure, and later it included learning outcomes as a priority. The reforms implemented by the delivery approach were top-down and relied on high-stakes accountability that held district officials responsible for meeting school and district targets, with data-intensive monitoring at the school level. The delivery unit converted the data into heatmaps to show how districts were progressing against their targets. Based on the data, a system was put in place to flag underperforming clusters of schools, called markaz.



## Jordan

Jordan had three delivery units operating in the education sector between 2010 and 2019. The Results and Effectiveness Unit was set up in 2016 to ensure accountability for results in implementing the 2016–2025 Human Resource Development Strategy. As part of the Economic Development Directorate in the Royal Hashemite Court, the unit monitored progress, resolved bottlenecks, and worked with teams in the Ministry of Education and other stakeholders. At the Ministry of Education, a project implementation unit established in 2003, the Development Coordination Unit, evolved into a de facto delivery unit in 2017, coordinating across sector donors, service providers, and nongovernmental organizations (NGOs) toward common, coherent, and standardized goals. It spearheaded the development of the ministry's sector plan and was responsible for monitoring progress toward plan targets. The Prime Minister's Delivery Unit (PMDU) was established in 2010 at the prime minister's office to ensure effective implementation of the government's priorities, and it had a multisectoral focus, including education. The PMDU worked closely with the Cabinet and the PM to identify national priorities across sectors. Ministers were held accountable for results. The PMDU obtained data and information from the line ministries and published progress toward national targets on an online dashboard made available to the public.



## Sierra Leone


In 2020, Sierra Leone's Minister of Basic and Senior Secondary Education, set up a delivery unit to support implementation of the Free Quality School Education program. The unit was established as a parallel structure in the ministry and staffed with four full-time team members and experts from other organizations. Leveraging data systems and analytical support, it seeks to improve policy implementation by better coordinating efforts across ministerial departments and donors and building the capacity to understand reform progress and challenges needing immediate attention.



## Tanzania

In Tanzania in 2013, the government launched the Big Results Now initiative—a delivery unit approach to reforms in education and five other sectors. The goal was to increase pass rates in both primary and secondary schools to 80 percent by 2016. To this end, the government identified interventions ranging from ranking schools on performance to training teachers on effective teaching, to directly transmitting capitation grants to principals, and developing school improvement toolkits for head teachers. The delivery unit primarily operated at the national level, with the regular district-level bureaucratic-administrative apparatus serving as its implementation arm.

## Are Delivery Approaches Effective?



*“With the findings that the delivery approaches had limited influence on changing behavior at the school level, I would like us to pay attention to the linkage of the Delivery Approaches to the School leadership structures (both pedagogical and transformational) because this is where the real learning takes place and that is where the target for behavioral change should be.”*

Teopista Birungi Mayanja, Chairperson,  
Uganda National Teachers Union Board of  
Trustees, Commissioner, the Education  
Commission

DeliverEd research on delivery units in Ghana, Pakistan, Jordan, Sierra Leone and Tanzania analyzes the delivery approach structures and ambitions and sheds light on the effectiveness of delivery approaches for improving policy implementation.

### The evidence shows that delivery approaches are more effective at:

- **Leveraging political and bureaucratic sponsorship** to shift attention toward key national priorities and results. Political support helps focus attention on national and sectoral priorities and signals a shift from inputs and processes to results.
- **Clarifying roles and responsibilities and improving coordination and alignment** among national agencies and donors. For example, Ghana’s NERS, working with 17 Ministry of Education agencies, increased the awareness of and sharpened the focus on the goals of the Education Sector Strategic Plan. It also improved coordination and helped clarify key roles, responsibilities, actions, and routines for accelerating implementation.<sup>12</sup>
- **Achieving input and process targets at the central level**, including unclogging legal, structural, procurement, funding, and legislation bottlenecks. In Jordan, for example, the delivery units at the Royal Hashemite Court and the prime minister’s office unblocked financial and legal barriers. They also expedited procurement processes and the passing of legislation to implement the first teacher education program and the National Center for Curriculum Development.<sup>13</sup>
- **Strengthening and aggregating data and linking it to indicators and targets to make the monitoring and measurement of progress easier.** For example, in Pakistan’s Punjab province, the delivery approach used the strong data system that was in place (with data down to the school level) to create heatmaps that signaled whether districts were on- or off-track in meeting implementation targets. The data were presented at regular stocktake meetings to inform decision-making, which led to continuous use at the district level.<sup>14</sup>
- **Introducing top-down and usually high-stakes accountability and incentives** (rewards and sanctions) linked to performance. For example, Punjab introduced accountability routines at the regional and district levels based on performance data. The naming and shaming of poor performers in the quarterly stocktake meetings with the chief minister was combined with having the top performers receive a monetary incentive.



## Delivery approaches are less effective at:

- **Prioritizing solutions and changing behaviors to bring about improved learning in schools.** Delivery approaches work usually from the center to the frontline and hardly ever build middle-tier capacity or address local constraints, including lack of resources and autonomy to ensure implementation down to the school level.
- **Ensuring strong linkages between intermediate (process) targets and the ultimate goals of improving learning outcomes.** All delivery approaches involve a complex pathway to change, with rigorous intermediate goals and targets selected based on a theory of change. However, not many delivery approaches focus on measuring and improving student learning outcomes from the outset.
- **Using data to drive analysis, problem-solving, organizational learning, and adaptation at all levels,** particularly at the subnational, mid-bureaucracy, and school levels. Delivery approaches may generate opportunities for organizational learning, often in an ad hoc or informal way. However, forums for problem solving and knowledge sharing are not always prioritized, especially for downstream actors in the education system. Delivery approaches also do not tend to encourage bottom-up feedback loops.
- **Mainstreaming accountability and anticipating and addressing its negative or unintended consequences.** Some delivery units face challenges in harmonizing accountability for results and streamlining implementation because they are unable to integrate the accountability requirements that bureaucrats already has, resulting in delays and inefficiencies in implementing tasks.
- **Ensuring that improvements in managerial knowledge, behavior, and norms endure after political changes or the end of donor support.** Delivery approaches are usually housed in newly created units with non-civil service staff linked to a particular leader and the availability of external funding. These factors make the practices they introduce difficult to sustain over time.

Given the mixed record of the effectiveness of delivery approaches, especially in improving learning outcomes, the purpose of this DeliverEd report is not to promote delivery approaches. Instead, given the worldwide interest in using delivery approaches to accelerate implementation, the purpose is to provide a framework to help policymakers consider how to harness the most useful aspects of delivery approaches and to make them as effective as possible when implementing reforms.

# The Launching, Learning, and Sustaining and Scaling Framework

This report puts forward a framework to guide policymakers, bureaucrats, and donors in considering what is needed when implementing systemic reforms using a delivery approach. The framework is built around launching systemic reforms using a delivery approach well, learning and adapting the interventions and approach based on regular data as implementation proceeds, and sustaining what is working so that the approach can be scaled up with growing political and popular support. Launching-learning-sustaining and scaling are core elements of an iterative process, with each element supporting the others.



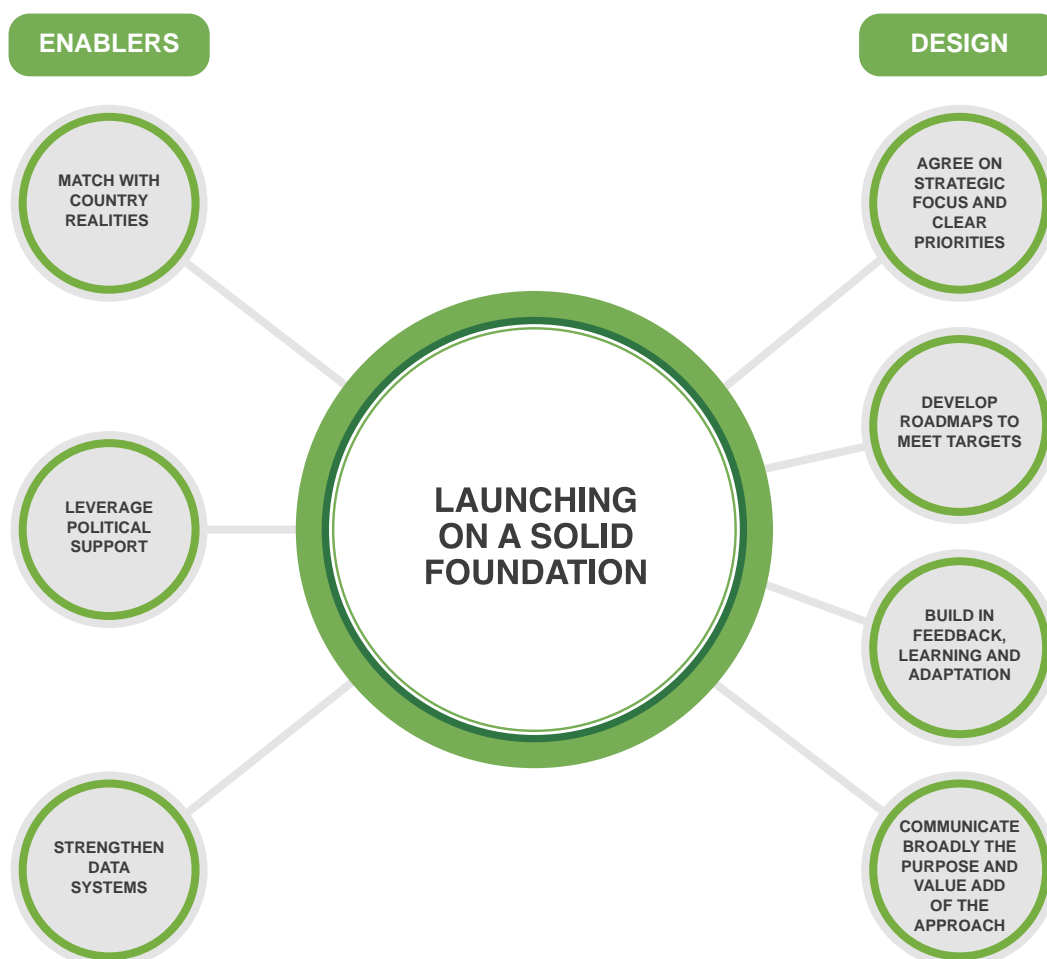
**Launching** a delivery approach to improve the performance of a system requires considering the enablers that need to be in place given the contextual realities and designing the delivery approach to be open to adaptation as implementation proceeds. Key enablers include strong political and bureaucratic leaders, good information management and decentralized data systems or the capacity to develop them, and both top-down and bottom-up accountability structures that enable feedback loops in both directions. The design needs to include a strategic focus and targets for learning outcomes, based on evidence of what works, appropriate staffing, adequate funding, and a well-thought-through communication strategy.

**Learning** quickly what is and is not working leads to adapting and reshaping the delivery approach and reform implementation strategies based on evidence. Learning involves monitoring the performance of departments, districts, and particularly schools, and analyzing high-frequency data in real time to inform decisions. Learning also involves collecting and analyzing data to identify and quickly rectify bottlenecks and local constraints through routine dialogues with schools, problem-solving forums at all levels, and stakeholder engagement. Targets and routines then need to be reviewed and revised based on the evidence to ensure a continuing focus on student learning.

**Sustaining and scaling** up what is working (and dropping what is not) involves building capacity, especially at the middle tier, so that the improved management functions, routines, attitudes, and behaviors are embedded at all levels. This requires building a culture of data and evidence-driven decision making, capacity building, knowledge exchange, peer support, and organizational problem-solving. Scaling up requires having the funding and resources to ensure adequate implementation of reforms at all levels, from the center to the frontline. Sharing evidence of improved learning outcomes through the implementation of a strong communications strategy can help maintain momentum. Durable political, bureaucratic, and popular support can then sustain the delivery approach so that it can survive changes in political regimes and the end of donor support.

# Launching

Delivery approaches spend a great deal of time, resources, and effort on launching. To launch a delivery approach well, an initial assessment needs to be based on the contextual realities to decide whether certain enablers are in place for it to succeed, and if they are, to take some key factors into account for the design of the delivery approach.



## KEY ENABLERS FOR A ROBUST LAUNCH

### Assess realities of country context and implementation capacity

It is important to assess whether, in a particular context, a delivery approach is the best solution for accelerating reform implementation to improve student learning - and whether certain “enablers” are present for a delivery approach to succeed.<sup>15</sup> Just as education policies and reforms can outrun the capabilities and inclinations of many country education systems, so too can the purposes of education reform implementation outrun the capabilities and inclinations of education bureaucracies. The UK Prime Minister’s Delivery Unit had a stable economy with stable governance and capable civil servants. Malaysia’s PEMANDU also had a stable economy, a longstanding democratic political system, and a reasonably well governed bureaucracy. It also had a public institutional ecosystem for performance management focused on results—an enabling environment to flourish.

Delivery approaches could, for example, improve resource allocation. Several diagnostic tools have

been developed to assess and support the implementation of education reforms and policies, such as the Research on Improving Systems of Education (RISE) program, the World Bank Systems Approach for Better Education Results (SABER), the Global Partnership for Education Enabling Factors Screening Questionnaire and analysis, the Capacity Needs Assessment Framework, and the Global Policy Dashboard.<sup>16</sup> Delivery approaches could identify the tools most relevant for each country's context and use them to collect and analyze data to inform policy delivery.

## Establish strong political and bureaucratic support

Delivery approaches are often launched by a president, prime minister, or education minister, who seeks to deliver better outcomes by having the bureaucracy implement ministry plans, policies, and reforms. Delivery approaches offer a pathway for accelerating reform implementation, usually accompanied by external technical and financial support. Just under half of the delivery approaches mapped were in a president's or prime minister's office, just under a third were in a line ministry, and under a quarter were in a state, province, or district office.

Delivery approaches can be appealing to leaders, because they signal to the public that the leaders are doing something to hold bureaucracies accountable for results. But leaders should also be willing to be held accountable for results themselves and show genuine interest in advancing learning outcomes by, for example, better understanding what is needed at the frontline to improve learning.

Political support helps shake the system and direct attention to key priorities. Speaking to the impact of political support, a deputy commissioner of Dera Ghazi Khan, Punjab said, "I think after 2009 there was a lot of focus by the government and there was funding too." (Malik & Bari, 2023). Having strong political leaders spearheading reform implementation helps build momentum for reform, and it shifts attention and resources to performance and results. However, that support does not mean that all actors in the education system know about the delivery approach or welcome its activities, so clear and frequent communication mechanisms are needed. Because support can swiftly end with the arrival of new leaders, strong bureaucratic leadership is also needed.

Tanzania's Big Results Now (BRN) program was launched early in President Jakaya Kikwete's second term, with the support of the ministers for public services. President Kikwete, a leading champion of BRN, had all participating ministries reporting directly to him. In Punjab, Pakistan, the chief minister established the Education Roadmap and Delivery Approach, attended all 39 stocktake meetings to hold districts accountable, and took action to solve implementation bottlenecks in the quarterly high-stakes meetings over seven years.

## Consider appropriate staff

Delivery approaches are usually executed by delivery units that are parallel to the bureaucracy and staffed by external consultants, and they are established under the executive leadership of, for example, a minister of education. Delivery units are usually small, with some exceptions (Malaysia's PEMANDU had a staff of approximately 100 people.)

In addition to planning, implementation, and communication experts, delivery units should consider including data experts to assess what data exists and what is needed for data, monitoring, and evaluation systems and help raise the capacity of civil servants to collect, use, and analyze data. More importantly, delivery units for the education sector should also consider education experts (or



liaise with national agencies) who understand the teaching and learning process and the available tools to collect data on what is and is not working at the classroom and the school levels to improve learning.<sup>17</sup> Whether these experts are available in-country or brought in from abroad, and whether they will accept civil servants' contracts (including salaries) needs to be considered, as these matters have sustainability implications.

## Harness and strengthen or set up data systems

An important condition for a delivery approach is having a data system in place or the capacity to create one quickly. Monitoring and evaluation systems that regularly track relevant and reliable data, including student learning outcomes, can measure progress and help identify local implementation constraints. Some countries (Pakistan, for example) already have a system to collect data at the school level and a very strong data collection and monitoring capacity through networks of monitoring and evaluation assistants who visit schools to collect data. Many countries use delivery approaches to improve data systems.

In Ghana, the NERS is helping to develop the national integrated data management system to include learning, administrative, and inspection data. In Sierra Leone, one of the key goals of the delivery unit was to build data-gathering and monitoring systems so that the education bureaucrats could track key indicators related to performance and quickly identify implementation challenges. The unit worked with the minister on developing the systems and key aspects of data collection and digitization.<sup>18</sup>

## KEY DESIGN CONSIDERATIONS

### Agree on a strategic focus and set clear priorities and targets to improve student learning

Most education delivery approaches set ambitious national goals - improving education access and quality, and better managing the delivery chain. However, they usually take on too much, and their priorities are often mainly concentrated at the center. They may not consider local priorities and needs, or they may seem threatening, and thus they may not be embraced further down the delivery chain. It is therefore crucial to balance national and local priorities and needs.

Delivery approaches should focus on improving student learning. Even though delivery approaches aim to shift attention from inputs and processes to results, the priorities set are rarely focused on outcomes, especially learning outcomes. Perhaps it is too hard to link learning outcomes to structural reforms at the center, and reforms take time to produce desired results. For instance, in Punjab, "The targets probably needed to change after the first few years, but this did not materialize. Monitoring systems were set up, army officers were hired [for data collection] but following that quality was not focused on," the deputy commissioner of Okara told our researchers (Malik & Bari, 2023).

Ideally, delivery approaches should measure student learning, set targets, understand what it takes to improve them, and focus on accelerating the implementation of those initiatives with support from the center and the middle tier.

In its first years, Punjab's delivery approach focused on three priorities: school enrollment, teacher attendance, and school infrastructure. The delivery approach also concentrated on 13 targets to be

achieved in a three-year period; these were focused on inputs or prerequisites for learning rather than learning outcomes (though this changed over time).<sup>19</sup> Ghana's NERS aimed to implement the 12 reforms in the 2018 Education Strategic Plan. These 12 priorities formed the backbone of the minister's reform agenda.<sup>20</sup> Sierra Leone's delivery unit was tasked with further prioritizing reform projects set in the Education Sector Plan and the Free Quality School Education program to make implementation more feasible. While the unit did work closely with the minister to establish a list of priorities, it struggled to make the list manageable for implementing bureaucrats.

## Develop detailed and flexible roadmaps to meet targets

Delivery approaches help link data to targets while introducing top-down and usually high-stakes accountability linked to performance. They typically use roadmaps to lay out the activities to meet the targets, consider who needs to do what, and determine how best to manage the interdependencies. Delivery approaches should be designed with key stakeholders, with sufficient granularity at all levels, including detailed implementation arrangements at the school level, but with enough flexibility to adapt and evolve. "It is good to have a target, and even better to have worked out a trajectory on how you plan to improve performance over time to hit the target" (Gwyn Bevan, Emeritus Professor of Policy Analysis, London School of Economics & Political Science).

In Ghana, the delivery approach was initially designed to strengthen the work of national agencies under the Ministry of Education. Annual performance agreements with national agencies included output and outcome key performance indicators (KPIs) and quarterly targets, operationalized through detailed annual roadmaps. The national roadmaps helped clarify national agencies' roles and responsibilities and improve coordination among them. The National Education Reform Secretariat provided capacity-building support to agencies to identify KPIs, set targets, and monitor their performance. Performance data were submitted in NERS-developed reporting templates and presented in quarterly "accounting to the minister" meetings. Indicators, targets, and roadmaps were well understood by national agencies. However, there was less detail on how to implement the delivery approach at the regional, district, and school levels.<sup>21</sup>

## Build in feedback, organizational learning and adaptation mechanisms

Delivery approaches promise to help downstream officials and school leaders do their jobs better so that service delivery is improved. However, most delivery approaches focus primarily on setting centralized targets and cascading them down to decentralized managers through accountability routines. They pay less attention to organizational learning or forums for problem-solving among those responsible for delivery. Using Elmore's (1979) terminology on education reform, Bell et al. (2023b) note that, "Delivery approaches tended to be designed more through 'forward mapping' (thinking about how to translate high-level policies into frontline changes) than through 'backward mapping' (thinking about how central actors can enable frontline workers to be more effective)."

To learn what works and how, it is important to introduce norms and mechanisms for organizational learning from the start. This could involve convening groups of stakeholders that do not usually interact along the delivery chain to identify and solve problems together—and supporting decentralized managers in using data to identify and solve performance problems. Ensuring that organizational learning is built into the design of delivery approaches—and that such learning is not crowded out by other components or demands of the approach—should figure prominently in the design or redesign of delivery approaches. Principals and teachers should be involved from the start,

and their input should be sought on best practices, which will help to set and implement goals and priorities at the school level.

### **Communicate clearly about the purpose and value-add of the delivery approach to all stakeholders**

Most delivery units have strong communication strategies, in particular at launching, but the emphasis is often on communicating from the center to the rest of the education delivery chain. Although communication is key to fostering ownership and mitigating resistance, few delivery approaches communicate the purpose and value-add of the delivery approach to all stakeholders and ensure that information flows in both directions of the delivery chain. Frontline officials and teachers often see the delivery approach staff as threats, especially initially, but sometimes these actors change their views as the usefulness of delivery approaches in coordinating and unblocking implementation challenges becomes evident.

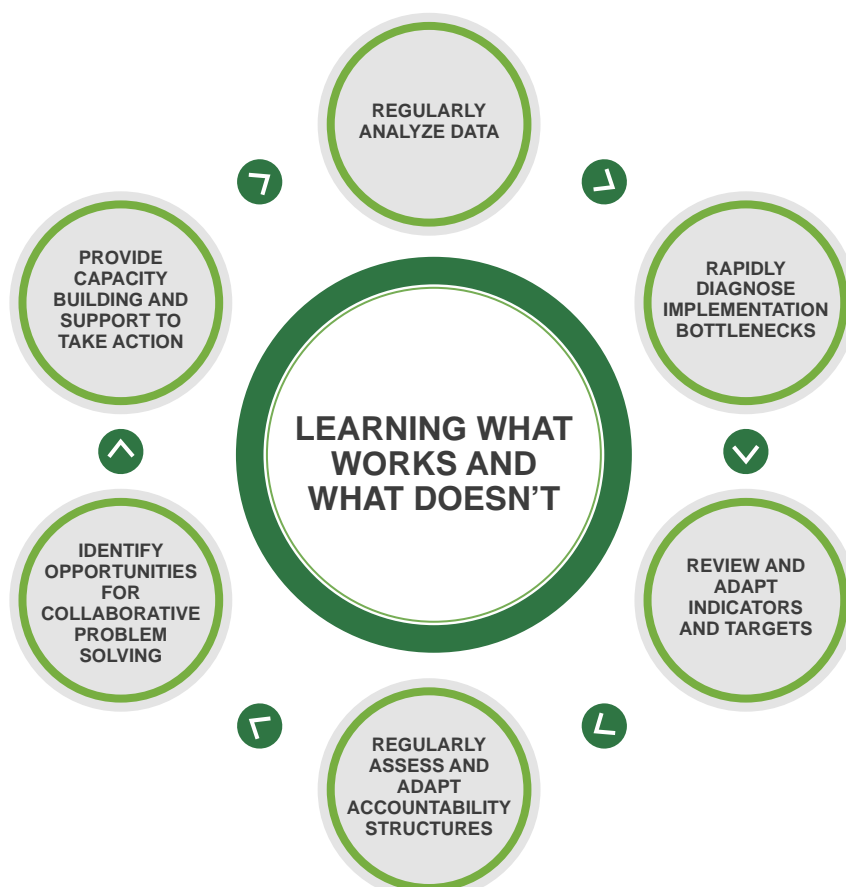
In Sierra Leone, initially there were tensions between the delivery unit staff and the ministerial staff and civil service counterparts. However, the delivery unit's communications staff demonstrated that the unit supported rather than replaced civil servants by sharing results and showing the value of the unit's work over time.

# Learning

*"... We are preaching to [the GES] that they should use problem-solving approaches to understand the problem and find solutions to it and should not hesitate to adapt to new ways of doing things... Because the delivery approach is a new concept to all of us, even though aspects of it can be found in what we were already doing... So, if you look at it and it's not working, don't hesitate. Don't be shy to say 'no, this is wrong and this one will be better'... So that we can all say even though we all inherited the delivery approach, but we altered it a little to fit our situation".*

An interviewee at the Ministry of Education Ghana

Delivery approaches disrupt education systems with new managerial routines and new or repackaged data. Those disruptions can be designed to induce organizational learning up and down the delivery chain. Ministers can learn from new quarterly, monthly, or even weekly briefings, data heatmaps, and dashboards. Senior education officials and regional and district education officers can learn from new data on performance. School principals can learn how implementing new approaches can improve their school's performance.<sup>22</sup> This learning needs to be captured and used so that the reforms and the delivery approaches to accelerate their implementation are based on data and evidence.



## Analyze data regularly to understand what is working - and what is not - to adapt policy interventions based on evidence

In the countries studied, the data spotlight issues, provoke discussions, and make abstract issues tangible. Data were useful for deep dives at the center but tended to flow from the bottom up, often for top-down accountability routines. Access to data alone did not lead frontline actors to use the data for problem solving and decisions at the local level, where it would have been more useful. Gaps in staff capacity at decentralized levels sometimes inhibited the design and tracking of relevant indicators and targets to improve learning.

The Rwandan government set up the National Examination and School Inspection Authority in 2020 to improve monitoring of the quality of education delivery through school inspections, national examinations, and learning assessments. Analyzing data from the Learning Assessment of Rwandan Schools, the authority provided critical insights about the Rwandan education system, allowing policymakers and administrators to make data-driven decisions about resource allocations as well as teaching and learning practices. System wide changes include:

- Revising the senior secondary curriculum and moving from a knowledge-based to a skills-based curriculum, making it more responsive to student needs and strengths.
- Increasing accountability among teachers and school administrators through the monitoring of student learning outcomes and use of data.
- Increasing instructional time for Kinyarwanda, English, and mathematics and introducing double shifts in primary schools.
- Improving assessment practices in schools through better alignment with learning objectives, the development of more reliable and valid assessments, and more timely feedback for students.
- Improving teacher development and support by providing free teacher guides and learning materials, establishing teacher resource centers, implementing effective continuous professional development, and training more than 2,800 primary and secondary school teachers.
- Strengthening the capacity of education authorities to collect and analyze data on student learning outcomes, leading to more effective monitoring and evaluation of education policies and programs, and greater capacity to respond to future challenges.

High frequency data are often collected but not always analyzed and leveraged to inform improvements in monitoring and evaluation systems or the education system as a whole. In some cases, this is due to limited skills in the bureaucracy. In other cases, the deadlines assigned to targets are too tight to accommodate the time and human capital required for data analysis and use.

The quantitative study of Punjab's delivery approach found that the markaz (school cluster) flagging system had no effect on output or outcome metrics, which included district and school rankings, teacher and student attendance, functional facilities, and scores for mathematics, English, or Urdu. There also was no effect on school rankings. The delivery approach used a wealth of data, but it could not improve student performance. Possibly the monitoring was capturing the high variability in the system caused by short-term fluctuations in school performance, rather than more structural issues that could better explain school performance. For example, the same study found that head teachers were a strong determinant of student learning and that teacher attendance improved school infrastructure. It also found that head teachers had different strengths and weaknesses that explained why school performance was better in some areas than others.<sup>23</sup> If this information had been available when the approach was active, the approach could have been adapted to focus on promising initiatives to improve student learning.

## Rapidly diagnose bottlenecks throughout the delivery chain

Thanks to high-level sponsorship, delivery approaches have degrees of freedom that line agencies and departments do not have. However, delivery approaches deal with complex systems. Much of the focus on delivery approaches seems to be more about pushing bureaucratic levers to improve inputs and processes. Few delivery approaches appear to have focused on classrooms to address teacher skills, pedagogical practices, or evidence-based interventions proven to increase access and improve learning.

The Ministry of Basic and Senior Secondary Education (MBSSE) Delivery Unit in Sierra Leone conducted an exercise to understand the bottlenecks for accessibility to exams and placement results for secondary school students. In collaboration with EdTech Hub, the ministry then helped digitize and send exam results and school placements through text messaging to reduce costs and time and improve accessibility, particularly for students in rural areas. In Punjab, heatmaps helped visually display the performance gaps between districts in southern Punjab and other areas, and this helped justify the directing of more resources to consistently underperforming districts.

## Measure, review, and revise targets and indicators to focus on student learning

Collecting regular and reliable data on student learning outcomes is a persistent challenge for many countries, with some not collecting such data or doing so only for a limited number of subjects. Some delivery approaches implement holistic education reforms when student learning data are not yet available, and others aim to implement learning assessments. Student assessments that comprise both formative and summative evaluations are essential for refining goals, assessing learning outcomes, and adapting teaching and learning strategies. Providing capacity-building and support to the mid-tier and frontline staff to act on these assessments is important.

The aims of the Punjab Education Roadmap evolved from higher school enrollment rates, better teacher attendance, and improved school infrastructure to focus on developing assessment systems and investing in routine and robust student testing. The new focus also included enhancing teacher professional development, expanding supplies, and reforming textbooks.<sup>24</sup>

## Regularly reassess accountability structures

High-stakes accountability is commonly used by delivery approaches to improve performance. It may attract attention and generate activity to improve operational inputs in education systems (e.g., delivering textbooks or building schools), but it seems less effective for driving behavioral change at the frontline.<sup>25</sup> Delivery approaches should therefore regularly assess accountability structures and routines to understand their intended and unintended consequences and adapt them accordingly. It is also important to continually ensure a balance of accountability and organizational learning, problem solving opportunities, and support for stakeholders throughout the delivery chain.

In Punjab, the delivery approach made district coordinating officers (DCOs), accountable for the achievement of education targets. Changes to local government laws halfway through the period of the delivery approach altered service delivery responsibilities at the district level. DCOs no longer had executive authority on key functions, for example financing. However, the delivery approach was not adapted to respond to this change. There may also have been a misalignment in rewards and



sanctions even before the changes, as DCOs—but not executive district officers (EDOs), district education officers (DEOs), deputy district education officers (DDEOs), or school-level leaders—were rewarded for good school performance. DCOs were responsible for education and many other sectors and acted mainly as coordination officers between the Chief Minister’s Office and the district education departments (including the EDOs) which were much closer to the schools. “I think bonuses were only given to DCs or EDOs but everyone should have gotten them because this was through collective efforts targets were achieved so if everyone who were involved got them then it would have encouraged them. So, I found this least effective, giving the bonus to just the upper management,” a DEO in Rawalpindi, noted (Malik & Bari, 2023).

Even though the accountability routines, such as quarterly review meetings, and the upstream reporting requirements enabled the district to focus on common priority targets, these routines also had mixed effects on bureaucrats. DCOs were reportedly energized by the competition among districts and the promise of financial rewards. However, more junior administrative education staff at the subdistrict level reported feeling a great deal of stress and pressure from these frequent monitoring and review routines, which often cultivated a culture of fear and affected their productivity and motivation. There also was no accountability from the bottom of the system to the top, such as school leaders holding districts to account and so on up the system. “The quarterly rankings and the performance accountability caused a lot of concern” (DCO Rawalpindi, Punjab in Malik & Bari, 2023). “... Because of these meetings there was fear and there was this tension that had an effect on our health and our personal life as well. And targets that were given sometimes were such that they were unachievable” (Malik & Bari 2023).

Similarly, greater use of accountability routines at the district level in Ghana was found to be correlated with lower satisfaction among district office staff, as well as higher teacher absenteeism, and less teacher-student time-on-task (Boakye-Yiadom et al., 2023).

## Identify organizational learning opportunities and forums for collaborative problem-solving at all levels

Delivery approaches sometimes generate opportunities for organizational learning, often as an unintended benefit rather than by design. Effects seem stronger when delivery approaches create both formal and informal channels and opportunities for organizational learning that are integrated into the mainstream civil service. As delivery approaches serve as focal points with a mandate for reform, the actors in delivery approaches learn over time about challenges in their policy areas, about their roles, and about broader systemic strengths and weaknesses. However, creating formal spaces for stakeholders to meet, share knowledge and experiences, and analyze data together to solve implementation problems was not always explicitly articulated or prioritized. Few opportunities for shared learning were created downstream in the education system, and few resources were devoted to such opportunities.

In Ghana, in 2022, there was a shift in the delivery approach and the work of the NERS from its initial focus on high-stakes accountability to improving coordination and problem-solving across agencies. With support from the NERS, a national technical working group of agency specialists was established to work through the nitty-gritty details of implementation. Several data-driven, deep-dive presentations on cross-cutting issues (such as pupil absenteeism) were held each year by the NERS for national-level reform owners. Improved interagency coordination was attributed to these problem-solving procedures, including deep dives and technical working group meetings. Importantly, the agencies came to view the NERS less as a policeman and more as a vehicle for

support and capacity building at the national level, particularly by the newer, smaller, more specialized education agencies.<sup>26</sup>

At the subnational level, the delivery approach helped link district targets to existing procedures that required local stakeholders—including parents, representatives from the community, teachers, school leaders, and district officers—to meet regularly to analyze data and find solutions to improve learning. However, little progress has been made toward these targets due to local implementation constraints, such as the lack of time, fuel, or funding to conduct these meetings. For instance, an interviewee in Region 2 mentioned, “... the resources here are a big challenge..., is a serious challenge because, we are in the half year and as we speak now, we do not have even one cedis in our accounts... monitoring is zero over 100 because you see, we sit in the office here and some of the things that we do here, you must go to the field to see things for yourself. It is not about what they are reporting to you through the digital system”.<sup>27</sup>

## Provide capacity building and support to take action

Changing the organizational culture and norms to concentrate on prioritization, results, performance, and the use of data is not easy and requires a great deal of capacity building, support, and problem-solving spaces for managers at all levels, including those at the frontline. To implement management routines and other initiatives, support and capacity building have to be provided to the middle tier, where supervisors and pedagogical coaches can build trust with teachers and school leaders to develop a culture of school improvement and provide support and collaboration opportunities. These roles in an education system—and their importance in working with schools—is fundamental in creating and maintaining links among policy, implementation, and practice.<sup>28</sup> For centralized management reforms, various avenues should be explored to enhance the capacity of decentralized managers and other staff members.<sup>29</sup>

In Ghana, at the subnational level, annual targets were set by the GES, and quarterly targets were set by regional, district, and school heads. However, little or no training was provided to subnational actors on how to set targets, resulting in inaccuracies in the calculations of indicators and targets. Furthermore, subnational actors did not receive financial resources in a timely manner, which limited their ability to meet the targets.<sup>30</sup>

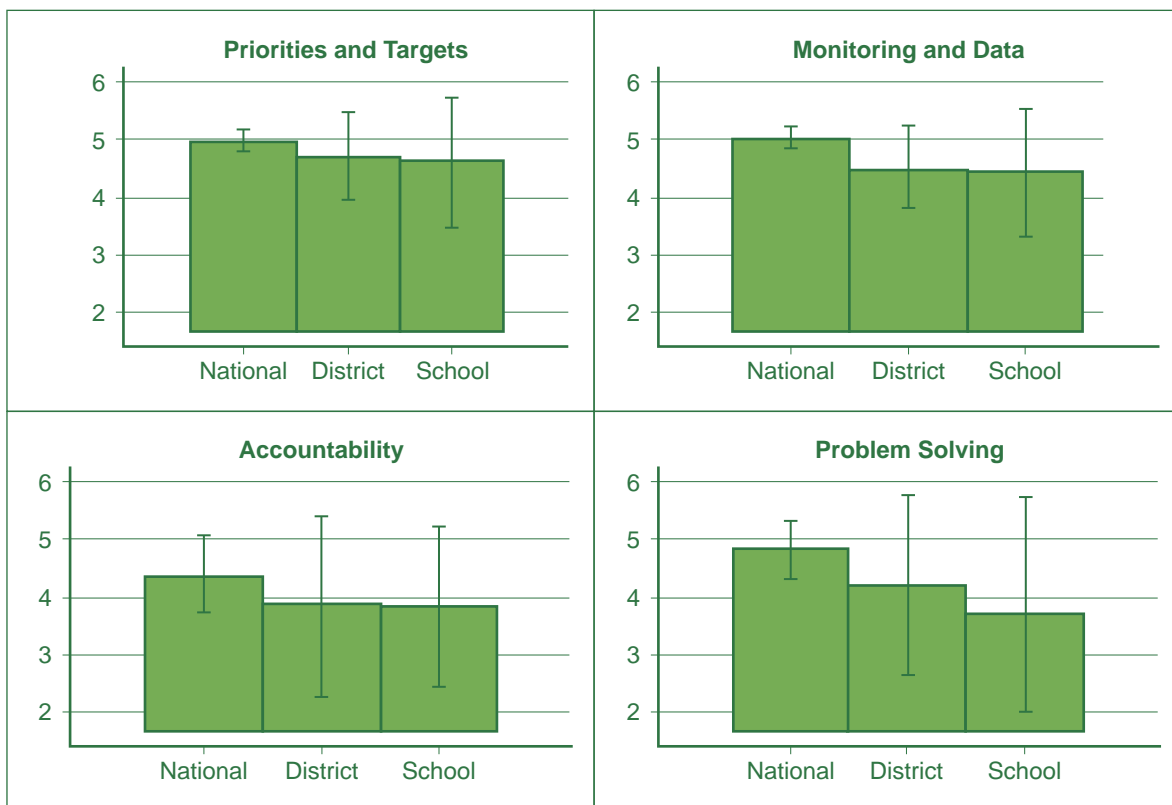
Brazil’s Lemann Leadership Center for Equity in Education started the Leadership Training Program in 2022 to strengthen the commitment and capacity of municipal secretaries of education, middle-tier managers, and school principals to improve learning with equity. From the school to the municipality, the program intends to transform education leaders’ beliefs, attitudes, visions, and management practices to improve education in their schools. The program focuses on pedagogical leadership, cultivates high expectations for students’ learning and development, and helps leaders collect and make better use of data to support decision making.

The program offers a new “hybrid” curriculum with a hands-on monitoring and mentoring methodology, collaboration and exchange among leaders, and a roadmap of implementation activities. The link to delivery is that program’s Systemic Transformation Laboratory works with municipalities and leaders to improve leadership practices and policy outcomes through delivery functions, including identification of priorities, data analysis and construction of indicators, problem-solving and knowledge sharing mechanisms, and strategies for political advocacy. The lab helps municipalities and school monitors use tools and techniques that are informed by implementation science and leadership research to understand what works and does not work in their contexts.

Municipalities are paired with a program focal point and a junior researcher to support the construction of a common and collaborative agenda focusing on data collection and analysis and co-creating solutions to challenges related to educational inequality, always based on evidence. Three thousand leaders, including municipal secretaries, school monitors, supervisors, and school directors from 66 Brazilian municipalities have been trained since 2022. Surveys of participants after their first year in the program found that 91 percent reported progress in their personal and professional development and 85 percent reported changes in their practices.

The research study in Tanzania found suggestive evidence that perceptions of staff regarding the use of delivery functions in Tanzania's education system varied. In particular, school staff (headteachers) perceived that much less attention was given to problem-solving routines at the school level relative to the national level. These findings suggest that at the frontline of the Big Results Now approach, problem-solving was at the lowest and opportunities not always available.

### Retrospective Evaluations of BRN Implementation



Source: Opalo, K. Using Delivery Units to Improve Public Services: The Case of Education Reforms in Tanzania. (June 2023) DeliverEd Working Paper.

# Sustaining and Scaling

*“Political support for this kind of initiative should also be at the sub-national level, especially in countries with decentralized systems, where there usually is more resistance for implementation. On the other hand, in countries where there are existing units of information—labs, evaluation units, statistics units—the implementation is better, although there may be some duplications.”*

Martin Benavides, International Institute for Educational Planning

Delivery approaches generally spend less time on sustaining and scaling up management practices that improve learning and ensure enduring changes and long-lasting results. The effective lifespan of delivery approaches is often tied to political leaders or administrations and the availability of external funding. This can create a mismatch between the resulting short-term nature of delivery approaches and the long-term goal of improving learning outcomes. While delivery approaches may receive strong support from central political leadership, there is limited evidence of their ownership by middle tiers and school heads, impairing widespread adoption and transfers of delivery approach practices across the system.



## Create a culture of prioritization, performance, and use of data for student learning

Delivery approaches should focus not only on establishing new managerial routines but also on embedding the changes in attitudes and behaviors from staff involved in delivery approaches throughout the delivery chain. However, they do not seem to be designed to leverage the capacity and responsibility of downstream and frontline leaders to improve service delivery. Most approaches work more to translate high-level policies into changes along the delivery chain than to have central actors supporting the middle tier, school principals, and teachers to deliver learning.

More attention also needs to be paid to transferring skills and behaviors among staff horizontally - across the many agencies and departments responsible for education - and vertically, from the center to the classroom and from the classroom to the center. If changes in routines, knowledge, and behaviors that focus on student learning do not reach districts and schools, student learning is unlikely to improve.

## Communicate results to secure political, bureaucratic, and popular support

Publicizing early results could generate political, popular, and parental support for sustaining these and other more complex systemic reforms. In this process the middle tier can ensure that communication flows both ways and that frontline providers get the support and resources they need to implement the reforms to improve learning.

In Jordan, the continuity of evidence-based programs like the Reading and Mathematics Program and the School and Directorate Development Program, which demonstrated positive impacts on learning outcomes, can be attributed to a coalition of stakeholders, including donors and the Delivery Coordination Unit within the Ministry of Education (MOE). Despite frequent changes in ministry leadership, these projects received sustained support due to strong evidence base and aligned and streamlined efforts across stakeholders to improve student learning and school leadership.<sup>31</sup>

## Mainstream accountability to foster and sustain improvements in learning

In addition to the already complicated accountability schemes-involving multiple executive authorities, civil service formal performance assessments, and donor reporting requirements-delivery approaches usually create parallel lines of accountability and incentives. Multiple accountabilities and a lack of autonomy can hamper downstream actors' abilities to respond to and sustain the routines introduced by a delivery approach.<sup>32</sup>

Policymakers may want to pay attention to how centralized delivery approaches can engage with stakeholders at all levels, including parents and communities. Boosting demand for better learning outcomes by helping school leaders and teachers interact more with parents and community leaders, to increase understanding and expectations about what schools should deliver, could help to sustain what works at schools.<sup>33</sup>

Bottom-up accountability can empower frontline providers (who know better and can respond faster to classroom needs) and help streamline multiple top-down accountabilities that can hamper the ability of subnational stakeholders to focus on student learning and increase the administrative and reporting

burden, leaving them with less time and fewer resources for local problem solving. Communicating results can also create more demand-side accountability that can help delivery approaches sustain and scale up the reforms leading to positive learning outcomes. Making information widely available can also help parents and communities hold schools accountable.<sup>34</sup>

## Scale up what works with resources and support

In addition to trying new combinations of managerial routines, the focus of delivery approaches should also be widened to identify and implement successful teaching and learning practices. Delivery approaches could start by prioritizing proven cost-effective interventions to promote learning rather than implementing broad wholesale reforms that aim to improve everything. That could involve testing some of the “great buys” and “promising buys” that the Global Education Evidence Advisory Panel (GEEAP) has identified.<sup>35</sup> It could also involve scaling up other interventions that have been proven to yield rapid improvements in learning.

Delivery approaches could also help identify novel routines and practices that are working in classrooms and schools in well-performing districts and pilot those routines and practices as testing grounds in classrooms in other districts to see whether those practices take hold. If these practices do take hold, they can be scaled up across the education delivery system, and the improvements can be publicized to secure and sustain political, bureaucratic, and popular support.

Teaching at the right level in the world’s largest country: from experimenting, trial and error and learning to scalable solutions. In many developing countries, teachers teach a demanding curriculum regardless of the level of preparation of the children. As a result, children who get lost in early grades never catch up. In response, Pratham, an Indian NGO, designed a deceptively simple approach, which eventually came to be called teaching at the right level (TaRL). The basic idea is to group children, for some period of the day or part of the school year, not according to their age, but according to what they know—for example, by splitting the class, organizing supplemental sessions, or reorganizing children by level—and match the teaching to the level of the students. Pratham’s experiments showed that learning improved substantially. Pratham took versions of the small-scale experiments, started in 2001 in Mumbai’s slums, eventually to reach 33 million children by 2009 in the “Read India” program, using this method of remedial instruction. The program showed the promise of TaRL.

Pratham then turned to scaling up the program, starting with a few large states in India. It took five randomly controlled trials and several years for the concept to become a scalable policy. By 2017, a school teacher-led model covered some 5 million children in 13 Indian states, and an in-school, volunteer-led model had reached more than 200,000 children in Uttar Pradesh state. The baseline and endline results for language competency by treatment status in Haryana and Uttar Pradesh states show what is possible. The percentage of students unable to recognize letters fell from 27 to 8 percent in Haryana and from 39 to 8 percent in Uttar Pradesh. The percentage of students who were able to read a paragraph or story rose from 30 to 53 percent in Haryana and from 15 to 49 percent in Uttar Pradesh.

As Banerjee et al. (2017) note, “The journey from smaller-scale internal validity to larger-scale external validity is a process that involves trying to identify the underlying mechanisms, refining the intervention model based on the understanding of these mechanisms and other practical considerations, and often



performing multiple iterations of experimentation”. This quote nicely sums up the importance of the link between learning and scaling up that should also motivate delivery approaches.

## Develop strong bureaucratic leadership and support to survive political change and the end of donor support

Housing delivery approaches within newly created units staffed by personnel who are not under civil service contracts has hindered the broader adoption of practices and undermined sustainability. Education bureaucracies often perceive the delivery approach teams as threats, creating some resentment and tension among delivery approach staff and civil servants, because delivery approach staff usually are not part of the civil service, they may get higher salaries, and sometimes they are recruited internationally. This perception of delivery units as threats can be gradually modified by anticipating the pushback from bureaucrats at all levels and by improving coordination and unblocking implementation challenges.<sup>36</sup>

In Tanzania, after President Jakaya Kikwete left the government and President John Pombe Magufuli took office with his own priorities (focusing on infrastructure), eight of the nine interventions initiated under the Big Results Now (BRN) program survived; five are ongoing. Although the delivery unit was established at the national level, the BRN relied on regular subnational administrative bureaucratic structures, so a change in the top-level political leadership did not completely alter the specific features of BRN.

The high profile and expertise of staff at delivery units brings fresh perspectives and new skills. However, delivery approach staff tend to leave when the units dissolve, as they usually are not willing to be made permanent with significantly reduced salaries. An effort to develop strong bureaucratic leadership and integrate the practices introduced by delivery approaches and their staff early in the process into all levels of the bureaucracy can help sustain changes over time.<sup>37</sup>

## Ensure adequate funding

Many delivery approaches are supported by donor funding within a confined period (usually three to five years). When the external funding ends, most delivery units cease to exist, and the practices that they introduced fade over time. It is therefore important to make transitional arrangements from those delivery units that are funded externally or housed outside the civil service structure well in advance, and ideally from the outset. Transition arrangements do not necessarily mean that the delivery units need to exist forever, but these arrangements should ensure that the routines introduced translate into long-term behavioral changes in the bureaucracy—for example, by funding some of the suggestions for sustainability made here.

# How Do Delivery Approaches Complement Other Ways Of Promoting Education Reform?

In this first phase of its work, DeliverEd researchers focused on delivery approaches and their impact as seen through the country and cross-country studies. However, the researchers were also conscious of the larger question, beyond the scope of this work, of whether a delivery approach was the right instrument for what governments wanted to achieve in student learning under their political, bureaucratic, classroom, and social conditions. A delivery approach provides a way for governments to organize the implementation of education system reforms. The choice of such an approach must clearly rest on assessing ground realities and the priority reforms being considered.

Two recent large-scale knowledge initiatives have also sought to understand which systemic education reforms have the best prospects for improving student learning in low- and middle-income countries. The Research on Improving Systems of Education (RISE) program has been exploring the fundamental system changes needed to ensure foundational skills for every child based on research in seven countries and on the political economy of reform. The Global Education Evidence Advisory Panel (GEEAP) assesses and summarizes the best, most up-to-date evidence from over 550 evaluations on the cost-effectiveness at scale of different interventions, sorting the “great buys” for improving learning from the “bad buys” and identifying the interventions in between.

All three initiatives seek to guide governments and other stakeholders on what works to promote learning. While DeliverEd focused on the impact of the organizing institutional framework of a delivery approach or unit as seen in so many countries, the other initiatives have focused more on providing a stepwise analysis and action framework for identifying and committing to the most promising coherent reforms aligned to learning (RISE), or a cost-effectiveness framework for setting reform priorities (GEEAP). The three research initiatives complement each other, with the launching-learning-sustaining-scaling framework of this report converging with several key themes of RISE and GEEAP, even as they offer different and useful perspectives on education systems reform to address the global learning crisis.

RISE contrasts the learning crisis with the tremendous worldwide success with raising enrollment rates and expanding schooling, suggesting five actions that can provide a pathway out of the crisis and toward providing foundational skills for all children:

- Commit to universal, early foundational learning.
- Measure learning regularly, reliably, and relevantly.
- Align systems around the learning commitments.
- Support teaching.
- Adapt what you adopt as you implement.

The RISE emphasis on committing to learning and then working from that commitment to the priority actions a government should undertake resonates with the DeliverEd finding that delivery approaches often focus on process and input improvements that may be easy to measure, to hold functionaries accountable and yield short-term political gains, but that may not substantially improve learning. The RISE emphasis on measuring, aligning, and adapting is also consistent with the learning and sustaining focus of this report. The RISE recommendation on supporting teachers and teaching sits well with the DeliverEd finding that many delivery approaches are top-down without

adequate attention to what happens in the classroom and how those dynamics can be changed. GEEAP ranks a range of interventions on their cost-effectiveness to promote learning. The “great buys,” that it lists include:

- Providing information on the benefits, costs, and quality of education.
- Supporting teachers with structured pedagogy.
- Targeting instruction by learning level, not by grade.

These recommendations speak to what should be considered as some of the core initial priorities in launching a delivery approach. These priorities can yield early results that can then be scaled up to generate popular and political support for sustaining these and more complex systemic reforms. In listing these priorities, GEEAP also encourages policymakers to review their specific context, their political economy, and implementation details, all important considerations for the launching and the scaling and sustaining parts of the LLSS framework.

In the same vein as these initiatives, the 2018 World Development Report, *Learning to Realize Education’s Promise*, implores educators to act on evidence to make schools work for all learners and to align actors to make the whole system work for learning. For a politician, policymaker, education functionary, or a donor, these complementary studies offer a rich menu of pathways to education systems reform.

Delivery units and approaches are one way of crystalizing a focus on improving the capacity of educational bureaucracies/ministries to actually implement and delivery reforms. Though complementary, they tackle a different type of problem than GEEAP and RISE, but one that deserves a great deal of attention. What we have learned from the DeliverEd research so far is that delivery requires careful consideration of capacity and engagement at all levels of the system. Stronger data and accountability are important, but they need to be embedded in a focus on capacity, engagement, and problem solving to meet implementation challenges among frontline and middle tier leaders. This is an area that calls for much more empirical research on improving public sector capacity for implementing reform and delivering education.

In summary: For governments and ministries thinking of using a delivery approach, the DeliverEd research emphasizes the importance of assessing and addressing contextual realities, ensuring that key enablers and design factors are considered, such as priorities that can yield early student learning, institutional learning opportunities, and evidence for sustaining and scaling from the very start. If implemented, the delivery approach should learn from and adapt to the data and evidence and build in problem-solving mechanisms as well as capacity building for the middle tier to help with scaling the interventions that are working. The management practices, routines, and cultural shifts should be embedded in the institutional structures so that the early wins can generate political and public support to sustain reforms through political cycles.

DeliverEd thus emphasizes the creation of a virtuous circle of launching reforms and delivery approaches effectively, capturing learning and adapting, and sustaining successful interventions, all building public and political support for scaling up and accelerating this process until a country can overcome its learning crisis and every child can leave school with strong foundational skills and beyond that help them realize their potential.

# Endnotes

- 1 Mansoor et al., 2021
- 2 Williams et al., 2021
- 3 Bell et al., 2023b
- 4 Bevan & Wilson, 2013
- 5 Ibid
- 6 World Bank, 2017
- 7 World Bank, 2018. The report underlines that in the absence of impact evaluations, it is unclear whether LINUS was the sole intervention that resulted in improved literacy and/or numeracy skills of young learners.
- 8 Williams et al., 2021 and Bell et al., 2023b
- 9 Mansoor et al., 2021
- 10 According to the global mapping exercise, 61 percent of cross-sectoral approaches and 39 percent of single-sector approaches focus on education.
- 11 Bell et al., 2023b
- 12 Bell et al., 2023b
- 13 Qarout, 2022
- 14 Gulzar et al., (2023) find that the Punjab monitoring and information system did not have an impact on output or outcomes. However, this does not seem to be due to the way that data was strengthened or packaged but rather to the fact that the system was capturing the high degree of variability within the system (short-term fluctuations in the schools), rather than more structural issues that could better explain school performance.
- 15 DeliverEd research focuses only on delivery approaches, highlighting their potential advantages and disadvantages, and suggesting ways to enhance their effectiveness. DeliverEd does not compare delivery approaches to alternative practices for improving management and education service delivery.
- 16 The Building Evidence in Education (BE2) group has conducted a mapping and overview of this and other diagnostic tools.
- 17 This could include classroom observation tools and management tools, such as the World Management Survey (WMS), etc.
- 18 Bell et al., 2023b
- 19 Malik & Bari, 2023
- 20 Bell et al., 2023a
- 21 Ibid
- 22 Williams et al., 2021 and Bell et al., 2023b
- 23 Gulzar et al., 2023
- 24 Javed, 2018 in Malik & Bari, 2023
- 25 Bell et al., 2023b
- 26 Bell et al., 2023a
- 27 Ibid
- 28 Childress et al., 2020
- 29 Adelman & Lemos, 2021
- 30 Bell et al., 2023a
- 31 Qarout, 2022
- 32 Bell et al. 2023b
- 33 Barrera-Osorio et al., 2009. Research shows that bottom-up accountability, as a reform approach, has demonstrated mixed effects on students learning, particularly in Africa.
- 34 Decentralization, school-based management, and other forms of bottom-up reform approaches to improve implementation have, however, demonstrated weaknesses in lower- and middle-income countries and proven more effective in advanced education systems. Barber et al., 2010
- 35 GEEAP, 2023
- 36 Bell et al., 2023b
- 37 Ibid.

## Bibliography

Adelman, M., & Lemos, R. (2021). *Managing For Learning: Measuring and Strengthening Education Management in Latin America and the Caribbean*. The World Bank.

Anderson, K., & Bergmann, J. (2022). *The Education Commission. Design Choices for Delivery Approaches in Education*, DeliverEd Initiative Policy Brief.

Anderson, K., & Carano, C. (2021). *The Education Commission. The Challenge of Delivering for Learning* DeliverEd Initiative Policy Brief.

Anderson, K., Ibarra, A., & Javaid, N. (December 2022). *The Education Commission. A Case Study of the Sierra Leone Delivery Unit*. DeliverEd Initiative Policy Note.

Banerjee, A., Banerji, R., Berry, J., Duflo, E., Kannan, H., Mukherji, S., Shotland, M., & Walton, M. (2017). *From Proof of Concept to Scalable Policies: Challenges and Solutions, with an Application*. National Bureau of Economic Research, Working Paper 22931.  
[https://www.nber.org/system/files/working\\_papers/w22931/w22931.pdf](https://www.nber.org/system/files/working_papers/w22931/w22931.pdf)

Barber, M., Chijioke, C., & Mourshed, M. (2010). *How the World's Most Improved School Systems Keep Getting Better*. McKinsey & Company.  
<https://www.mckinsey.com/industries/education/our-insights/how-the-worlds-most-improved-school-systems-keep-getting-better>

Barber, M., Moffit, A., & Kihn, P. (2011). *Deliverology 101: A Field Guide for Educational Leaders*. Corwin Press. <https://doi.org/10.4135/9781452219660>

Barcellos, T., Cunningham, M., Ibarra, A., Lee, C. (unpublished). *Lemann Leadership Center for Equity in Education Field Note*. The Education Commission. DeliverEd Initiative.

Barrera-Osorio, F., Fasih, T., Patrinos, H. A., & Santibáñez, L. (2009). *Decentralized Decision-making in Schools: The Theory and Evidence on School-based Management*. World Bank.  
<https://openknowledge.worldbank.org/entities/publication/5f764662-7f64-5f61-ad97-3bd1691f6bcf>

Bell, S., Leaver, C., Mansoor, Z., Mundy, K., Qarout, D., & Williams, M. J. (2023b). *The Role of Delivery Approaches in Education Systems Reform: Evidence from a Multi-Country Study*. DeliverEd Initiative Working Paper.

Bell, S., Asim, M., Mundy, K., Pius Nudzor, H., Boakye-Yiadom, M., Mensah Adosi, C. (2023a). *How Do Regions, Districts and Schools Respond to the Introduction of a Delivery Approach: Evidence from Ghana*. DeliverEd Initiative Working Paper.

Bevan, G., & Wilson, D. (2013). Does “Naming and Shaming” Work for Schools and Hospitals? Lessons from Natural Experiments Following Devolution in England and Wales. *Public Money & Management* 33(4), 245–252. <https://www.tandfonline.com/doi/abs/10.1080/09540962.2013.799801>

Boakye-Yiadom, M., Leaver, C., Mansoor, Z., & Locco, M. P. (2023). *Management and Performance in Mid-level Bureaucracies: Evidence from Ghanaian Education Districts*. DeliverEd Initiative Working Paper.

Childress, D., Chimier, C., Jones, C., Page, E., & Tournier, B. (2020). Change agents: Emerging evidence on instructional leadership at the middle tier. Education Development Trust, United Nations Educational, Scientific and Cultural Organization (UNESCO), International Institute for Educational Planning (IIEP), & the Education Commission.

<https://educationcommission.org/wp-content/uploads/2021/01/Change-agents-Emerging-evidence-on-instructional-leadership-at-the-middle-tier.pdf>

Crouch, L. (2020). Systems Implications for Core Instructional Support Lessons from Sobral (Brazil), Puebla (Mexico), and Kenya. RISE Insight Series 2020/020.

[https://doi.org/10.35489/BSG-RISE-RI\\_2020/020](https://doi.org/10.35489/BSG-RISE-RI_2020/020),

<https://riseprogramme.org/publications/systems-implications-core-instructional-support-lessons-sobral-brazil-puebla-mexico>

Cruz, A., & Loureiro, L. (2020). Achieving World-Class Education in Adverse Socioeconomic Conditions: The Case of Sobral in Brazil. World Bank.

<https://openknowledge.worldbank.org/entities/publication/c7c6c980-0772-53c6-98dd-98384dc44fc0>

Elmore, R. F. (1979). "Backward Mapping: Implementation Research and Policy Decisions." *Political Science Quarterly* 94(4): 601–616.

Elongue, C.C. (unpublished). Rwanda Field note. The Education Commission. DeliverEd Initiative.

Elongue, C.C. (unpublished). Gambia Field note. The Education Commission. DeliverEd Initiative.

Evans, D., & Loureiro, A. (2020). From Bad to Best: How One State and One Municipality in Brazil Are Eradicating Illiteracy and Innumeracy. World Bank.

<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/540371593598919465/from-bad-to-best-how-one-state-and-one-municipality-in-brazil-are-eradicating-illiteracy-and-innumeracy>

GEEAP (Global Education Evidence Advisory Panel). (2023, May)

Cost-Effective Approaches to Improve Global Learning: What does recent evidence tell us are "Smart Buys" for improving learning in low- and middle-income countries? Recommendations of the Global Education Evidence Advisory Panel.

<https://thedocs.worldbank.org/en/doc/231d98251cf326922518be0cbe306fdc-0200022023/related/GEEAP-Report-Smart-Buys-2023-final.pdf>

Gulzar, S., Ladino, J. F., Mehmood, M. Z., & Rogger, D. (2023). Command and Can't Control: An Evaluation of Centralized Accountability in the Public Sector. DeliverEd Initiative Working Paper.

Hanushek, E. A., Link, S., & Woessmann, L. (2013). Does school autonomy make sense everywhere? Panel estimates from PISA. *Journal of Development Economics* (104), 212–232.

<https://www.sciencedirect.com/science/article/abs/pii/S0304387812000661>

Javed, U. (2018, July 12). Implementing complex reforms: The Roadmap approach in Pakistan. Pakistan's Growth Story.

Leithwood, K., Louis, K., Anderson, S., & Wahlstrom, K. (2004). How Leadership Influences Student



Learning: Review of Research. Wallace Foundation.

<https://www.wallacefoundation.org/knowledge-center/documents/how-leadership-influences-student-learning.pdf>

Loureiro, A., Cruz, L., Lautharte, I., & Evans, D. (2020). The State of Ceará in Brazil is a Role Model for Reducing Learning Poverty. World Bank.

<https://www.worldbank.org/en/country/brazil/publication/state-ceara-brazil-role-model-reducing-learning-poverty>

Malik, R., & Bari, F. (2023). Improving Service Delivery via Top-down Data-driven Accountability: Reform Enactment of the Education Road Map in Pakistan. DeliverEd Initiative Working Paper.

Mansoor, Z., Qarout, D., Anderson, K., Carano, C., Yecalo-Tecele, L., Dvorakova, V., & Williams, M. J. (2021). A Global Mapping of Delivery Approaches. DeliverEd Initiative Working Paper.

OECD (Organisation for Economic Co-operation and Development). (2016). Improving School Leadership and Evaluation in Mexico: A State-level Perspective from Puebla.

<https://www.oecd.org/education/school/Improving-School-Leadership-and-Evaluation-in-Mexico-A-State-level-Perspective-from-Puebla.pdf>

Qarout, D. (2023.) The Accountability Paradox. Delivery Units in Jordan's Education Sector: 2010–2019. Education Commission and Blavatnik School of Government DeliverEd Initiative Working Paper.

Ross-Larson, B., et al. (2023). Why Students Aren't Learning What They Need for a Productive Life. RISE Political Economy Paper PE13. <https://doi.org/10.35489/BSG-RISE-2023/PE13>

Williams, M., Leaver, C., Mundy, K., Mansoor, Z., Qarout, D., Asim, M., Bell, S., & Bilous, A. (April 2021). Delivery Approaches to Improving Policy Implementation: A Conceptual Framework. DeliverEd Initiative Working Paper.

World Bank. (2017). Driving Performance from the Center: Malaysia's Experience with PEMANDU. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/318041492513503891/driving-performance-from-the-center-malaysia-s-experience-with-pemandu>

World Bank. (2018). World Development Report 2018: Learning to Realize Education's Promise. <https://www.worldbank.org/en/publication/wdr2018>

## List of Acronyms

BRN	Big Results Now (Tanzania)
BSG	Blavatnik School of Government
DCO	District Coordinating Officer (Pakistan)
DDEO	Deputy District Education Officer (Pakistan)
DEO	District Education Officer (Pakistan)
EDO	Executive District Officer (Pakistan)
FCDO	Foreign, Commonwealth & Development Office (UK)
GEEAP	Global Education Evidence Advisory Panel
GES	Ghana Education Service
IDEAS	Institute of Development and Economic Alternatives (Pakistan)
IEPA	Institute for Educational Planning and Administration (Ghana)
KPI	Key Performance Indicator
LINUS	Literacy and Numeracy Screening (Malaysia)
LLSS	Launch, Learn And Adapt, and Sustain and Scale Up
MBSSE	Ministry of Basic and Senior Secondary Education (Sierra Leone)
NERS	National Education Reform Secretariat (Ghana)
PADU	Education Performance and Delivery Unit (Malaysia)
PEMANDU	Performance Management and Delivery Unit (Malaysia)
PMDU	Prime Minister's Delivery Unit (Jordan)
RISE	Research on Improving Systems of Education
SABER	Systems Approach for Better Education Results
TaRL	Teaching at the Right Level
UNESCO	United Nations Educational, Scientific and Cultural Organization