Photographs: © UNICEF Jordan

The Accountability Paradox: Delivery Units in Jordan's Education Sector 2010–2019

DeliverEd Initiative Working Paper

Dana Qarout

November 2022

the Education Commission
UKaid from the British people
Blavatnik School of Government
University of Oxford

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 how 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 those include an education focus, either as a single focus sector or as part of a multisector approachi. But there was 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 their performance.

DeliverEd has helped to fill this evidence gap and create a better understanding of the practices leaders can adopt to improve their policy delivery and reform efforts. It has conducted research within and across countries on the effectiveness of delivery approaches in improving reform implementation, with the key findings included in this final report. It has facilitated knowledge and experience sharing 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. It 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 and funding from the UK Foreign, Commonwealth, and Development Office (FCDO). Other partners include the University of Toronto, the Institute for Educational Planning and Administration (under the Auspices of UNESCO), University of Cape Coast, Ghana, Institute of Development and Economic Alternatives (IDEAS) in Pakistan, World Bank, and Georgetown University in the U.S. 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.

We are very grateful to the Blavatnik School of Government and all 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 themselves, please see the next page.

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., Yecalo-Tecle, 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.

Abstract

Governments around the world have sought to strengthen accountability for results in the public sector by introducing central or sector-specific delivery approaches, such as delivery units. Whether these approaches have effectively streamlined accountability to produce coherent and desired results is a question with which development agencies and researchers are currently grappling. By drawing on secondary document analysis, a historical narrative, and 37 key informant interviews in Jordan's education sector, this retrospective study investigates the assumption that these delivery units could improve performance by enhancing accountability relationships within the system. The study finds that in Jordan, the delivery units did not always streamline accountability as intended. They often confounded accountability, particularly across complex and politically sensitive policy areas with multiple oversight bodies within and outside of government. While this multiplicity often led to negative consequences, such as project delays, duplication, and re-orientation, it also sometimes led to a sustained commitment to previous priorities where turnover among ministers was especially high. The insights from this study have implications for the question of whether creating a new delivery unit may confound rather than simplify and reduce the proliferation of accountability relationships in a multi-stakeholder ecosystem.

Acknowledgments

I would like to thank Dr. Martin Williams, who supervised my research and provided feedback throughout the research process. The study also received invaluable support and feedback from colleagues across the Blavatnik School of Government at the University of Oxford, the Education Commission, and the University of Toronto. Special thanks to Sheena Bell for providing invaluable feedback. This study would not have been possible without the cooperation of the Jordanian Ministry of Education and the Prime Minister's Office, as well as the donor community within the education sector in Jordan. Thank you to all the participants of the study, to whom I owe a great deal of gratitude for the wealth of knowledge they shared.

Please contact the lead author, Dana Qarout (dana.qarout@bsg.ox.ac.uk) if you have questions or comments with respect to content or reach out to (deliver.ed@educationcommission.org) for more information about the project.

Introduction

Since the early 2000s, governments around the world have been grappling with the mismatch between the ambitions of public policies and the outcomes they achieve in practice. Existing literature has discussed the drivers of such discrepancies, outlining the ways in which implementation failures are driven by multiple tensions between principals and agents, including information asymmetries, misaligned goals, and perverse incentives (e.g., Gruening, 2001; Brinkerhoff, 2004; Bevan & Hood, 2006; Bandiera et al., 2007; Booth, 2012). Less-than-effective implementation has compromised the success of well-intentioned public reform plans, calling into question the kinds of management practices and structures needed to orient the implementation process toward desirable outcomes. Politicians are faced with the urgent task of effectively directing and shaping bureaucrats' efforts to accomplish better results for which they feel accountable, and little empirical evidence exists on the effectiveness of these management efforts in improving bureaucratic performance and, subsequently, service delivery outcomes.

Governments have tried to resolve these challenges through various management practices, including monitoring and routine reporting, bureaucratic performance reviews and incentivization, expecting accountability for results, and the prioritization of key targets with clearly defined indicators (Gruening, 2001; Brinkerhoff, 2004; Bevan & Hood, 2006; Bandiera et al., 2007; Booth, 2012; Williams et al., 2021). Combining these management practices within a single structure in charge of monitoring and enhancing service delivery has become a prolific trend across countries around the world (Mansoor et al., 2021). Commonly known as a delivery unit, these structures are typically positioned at the apex of government and allowed oversight over the implementation processes (e.g., Williams et al., 2021). Over the last decade, delivery units have become a popular model for performing managerial functions that theoretically are intended to motivate better alignment between implementation and outcomes, as well as stronger accountability for results (e.g., Gold, 2015, 2017; Barber, 2015; Booth, 2012; Williams et al., 2021). Among the managerial functions that are widely adopted by delivery units around the world is the introduction or reinforcement of a streamlined accountability mechanism that bridges the gap between bureaucrats and their political principal (e.g., Gruening, 2001; Brinkerhoff, 2004; Bevan & Hood, 2006; Bandiera et al., 2007; Booth, 2012). In the public management and administration literature, accountability is defined as a relationship in which an agent is obliged to account for and justify her or his actions to their principal (e.g., Klein & Day, 1987; Dubnick & Romzek, 1998; Lerner & Tetlock, 1999; McCandless, 2001; Pollit, 2003). This may entail reporting data on staff

performance, outputs and outcomes, and procedures followed. Importantly, it entails providing explanations for delays, failures in achieving preset targets, and any other challenges that may impede effective policy execution (e.g., Bovens, 2007).

Despite the promise that delivery units hold for many policymakers regarding their mandates—sometimes legal, otherwise operational—to enhance accountability for results, adding another stakeholder to the policymaking landscape, with no shortage of accountability measures imposed by various stakeholders, can complicate policy implementation. This reality of public sector reform is referred to as the "multiple accountabilities" or "multiple principals" problem. This paper looks at the case of service delivery between 2010 and 2019 in Jordan's education sector, where we found that the simultaneous existence of three delivery units affected education reform and compounded a multiple accountabilities problem in education policy implementation. Each delivery unit, intended to make the implementation process more efficient and target-driven, intersected with the "jurisdiction" of another and thereby confounded accountability relationships and procedures. Understanding the historical narrative of why each delivery unit was initially introduced is critical to then inferring when, why, and how each structure operated and either succeeded or struggled to achieve the results it sought.

Using semi-structured interviews conducted with 37 key informants across the education sector, this study answers three main questions:
1) When, how, and why were delivery units introduced in Jordan's education sector?
2) How has the introduction of delivery units in Jordan affected the dynamic of public service delivery and accountability for results?
3) What are the potential consequences of introducing delivery units to leverage accountability on the results of policy reform efforts in the context of Jordan?

In addition to the interviews, the study relies on secondary document analysis of key education strategy documents, workplans, internal memos, and evaluation reports relevant to the implementation of education policies and programs.

The findings of the study suggest that if a delivery unit that is introduced in Jordan is unable to supersede competing accountability relationships in the system, the introduction may further compound a multiple principal or multiple accountabilities problem. This was the case particularly in the context of two executive government bodies—the appointed government and the Royal Hashemite Court—and a considerable donor community that was monitoring education reform. In exceptional

cases, such as with high turnover in senior leadership and converging priorities across stakeholders, multiple accountabilities can sustain the commitment to certain policy goals in an otherwise fluctuating reform space. This paper illustrates the effects of such a dilemma on the outcomes of policy and program implementation efforts through examples of reform areas which are particularly saturated with various stakeholders and which were repeatedly mentioned during the key informant interviews with government staff and other relevant stakeholders. These examples cover reform projects in the following areas: teacher policies, teacher training, curriculum reform, and the decentralization of school improvement. The examples provide descriptive evidence of how, in some cases, multiple accountabilities derailed implementation and led to duplications and inefficiencies in service delivery efforts and funding.

The study also finds situations in which multiple accountabilities in fact served implementation of reform rather than derailing it. In these cases, particularly where there was high turnover in political leadership, multiple accountabilities secured commitment to certain reform priorities—especially if stakeholders formed an advocacy coalition for these priorities. The empirical evidence illustrates through two examples of education reform projects (teacher policy and curriculum reform) how the desired outcomes were achieved in Jordan within the anticipated timeframe only when a delivery unit was able to supersede competing accountability relationships and centralize monitoring and reporting through a single structure within the center of government. The paper also provides select mini case studies of reform areas where multiple accountabilities ensured sustained efforts to reform commitments despite frequent changes of ministers.

To the best of my knowledge, there are few case studies that explore the consequences of introducing a delivery unit in a reform landscape with pre-existing accountability relationships and arrangements for monitoring and reporting on service delivery progress and outcomes, thereby creating—or further complicating—a reform space with multiple accountabilities. The existing theoretical and empirical literature on such problems provides hypotheses and evidence around the consequences of such a multiple principal problem on bureaucratic functioning. The effects may include lobbying costs, inefficiencies in monitoring and implementation, duplication of monitoring, and greater agent autonomy (e.g., Gerrish, 2016; Chun & Rainey, 2005; Chambers et al., 2012; Brinkerhoff, 2004; Booth, 2012; Hood & Dixon, 2010). However, there is little study of the implications that the anticipated solutions to such problems (i.e. centralization of accountability or delegation to a single principal vis-à-vis a delivery approach) can have on

pre-existing accountability mechanisms and implementation results.

There are several case studies showcasing the role that the delivery units within a central government could play in signaling priority for specific reforms to bureaucrats and resolving implementation bottlenecks (e.g., Gold, 2014, 2017; Freeguard & Gold, 2015; Barber, 2015; Harrison, 2016; Delivery Associates, 2018; Allesandro et al., 2014; Lafuente & Gonzalez, 2018). However, none of these documented experiences or other evaluations have thoroughly explored the implications of introducing a delivery unit to a reform ecosystem with pre-existing delivery units and multiple—and often competing—accountability relationships. This topic is important to study, as multiple accountabilities could have adverse consequences on reform outcomes and thereby undermine the goals of a delivery unit.

The objective of this study is twofold: first, it provides the first historical narrative of the development and evolution of delivery units in Jordan's education sector between 2010 and 2019. Second, the study investigates the interplay among delivery units, multiple accountabilities, results of reform efforts within this time period, and the political economy factors that either undermined or improved the progress toward the targeted goals.

This case study is organized into seven sections. The first section provides a summary of existing literature on delivery units. The second section describes the methodology used to conduct the case study, outlining the qualitative research methods employed, the different interviews conducted to inform the analysis, as well as the theoretically grounded coding and analysis carried out for the case study. Section three presents a descriptive summary of how, why, and when the delivery units were introduced in Jordan to enhance accountability in education reform, answering the first case study question. Section four answers the second case study question, presenting the analysis of the different types of accountability relationships found within the education sector between bureaucrats and various stakeholders. Section fives presents the analysis of the reform examples mentioned repeatedly in the interviews. These examples illustrate the consequences of introducing delivery units on policy or project implementation and the results that were therefore achieved. The sixth section of the paper discusses the implications of the findings from this case study on future theoretical explorations of the dynamics between delivery units and the reform landscape in the public sector. Section 7 provides a brief conclusion of the retrospective study and recommends questions to explore in future research.

Section 1: Existing literature and conceptual framework

1.1 Delivery units as mechanisms for enhancing accountability

One of the intended uses of a delivery unit is to resolve various implementation challenges that emerge from a complex environment involving multiple supervising entities, unclear or insufficient monitoring and reporting, and diverging interests among implementers along the service delivery chain (e.g., Simon, 1983; Rose-Ackerman, 1986; Wilson 1989; Rainey & Steinbauer, 1999; Carpenter, 2001; Gruening, 2001; Chun & Rainey, 2005; Khalil et al., 2007; Koppell, 2005; Gailmard, 2009; Duflo et al., 2012; Andersen & Moynihan, 2016; Andrews et al., 2017; Rasul & Rogger, 2018; Adelman & Lemos, 2020; Rasul et al., 2020). These challenges may include various scenarios between a rational agent, namely the implementing bureaucrat, and her or his principal, the supervising official or political appointee. The principal–agent theory is the most widely used paradigm for analyzing accountability relationships in the public sector. It offers academics a lens through which to explore variations in the institutional backdrop of a principal–agent interaction and thereby compare the conditions that explain the determinants of agent behavior in policy implementation (Gailmard, 2012). This paper relies on Jordan's case to examine the dynamic that a delivery unit introduces to the principal–agent model, highlighting certain contextual features that moderate and mediate the effects of a delivery unit on the implementation process, especially as it relates to the unit's accountability function. The case study sheds light on the implications of inadvertently introducing multiple principals to the same agent in policy implementation by establishing a delivery unit without addressing previous accountability lines that are not necessarily replaced by the new one.

A delivery unit can theoretically strategically centralize accountability through a structure at the apex of government; rather than delegating accountability to multiple or parallel stakeholders, a delivery unit can enhance, streamline, and clearly define the responsibility for the results (e.g., Brinkerhoff, 2004; Barber et al., 2011; Barber, 2013; Gold, 2014; Allesandro et al., 2014; Barber, 2015; Gold, 2017). A delivery unit establishes reporting streams to ensure that implementation bottlenecks are communicated and resolved among relevant personnel in a timely manner. One of the comparative advantages of bundling managerial functions vis-à-vis a delivery unit is the effect it has on the clarity of instructions that are passed down from political

[1] This paper refers to the delivery approaches identified in Jordan's case as delivery units, given that they are all structured as units, not processes.

sponsors to their agents regarding priorities and expectations for results. A delivery unit is often introduced especially for the purpose of flagging and resolving implementation challenges in a timely manner, while also frequently collecting data on the performance of the implementation effort and corresponding outcomes. Stock-taking has become an integral routine for delivery units, following the UK's Prime Minister's Delivery Unit (PMDU) example of regular check-ins with the PM following similar progress-report meetings with bureaucrats across ministries (CPI, 2016). A delivery approach, typically structured as units, can serve as the primary liaison between the political principal and bureaucrats through reporting routines and incentives. This arrangement ensures that civil servants along the delivery chain become primarily (and perhaps at times exclusively) accountable to that given delivery approach—and thereby the political sponsor in question—for results under the committed priority areas (e.g., Gold, 2014, 2017; Harrison 2016; Barber, 2015).[2]

A delivery unit can also have the effect of centralizing responsibility for outcomes of a given reform through a structure at the apex of government or vis-à-vis a political sponsor, thereby muting different interests and incentives across agents, which might impede or oppose implementation efforts (e.g., Barber, 2015; Harrison, 2016; Gold, 2017). Gold noted in her 2017 review of delivery units around the world that a delivery unit is only able to achieve its mandate and succeed if "there is no leadership coalition outside of the unit taking ownership for the government's results agenda," otherwise describing this occurrence as a "warning sign" for any delivery unit regarding its ability to accomplish its intended goals (p. 31). The delivery unit's leverage of accountability and incentives due to its proximity to and delegation from the political sponsor of policy priorities is intended to orient agents' actions toward the preset goals of the approach (Brinkerhoff, 2004; Barber et al., 2011; Barber, 2013, 2015; Gold, 2014, 2017; Allesandro et al., 2014).

This case study explores the dynamics of reform after introducing a delivery unit to streamline accountability. The paper looks at how a delivery unit navigates and reorganizes the hierarchy among pre-existing accountability arrangements to ensure that the reporting lines and policy or programdelivery instructions are not duplicated, conflicting, or ambiguous. The study also explores when and how the delivery unit leverages an authorizing environment to exercise its accountability function over bureaucrats or "agents" (i.e., receive and signal legitimate political sponsorship). It is

[1] It is important to note that this paper does not delve into public accountability driven by citizen demand for reform. In one of the examples discussed in the paper, we do discuss the role of the teachers' union in complicating the role of a delivery approach; however, the relationship between citizen and civil servant is not investigated in this case study.

important to note that the authorizing environment can vary by reform area. Whether a delivery unit maintains that legitimacy even in politicized reform areas, including those that attract a lot of public attention, is one of the areas explored through the empirical examples in section 5.

The study hypothesizes that in the absence of these two conditions (the absence of other competing accountabilities and the authorizing environment to leverage such accountability), introducing a delivery unit can create or further exacerbate the multiple principals or multiple accountabilities problem in policy implementation. This problem "refers to multiple collective action problems that organizations face when they must balance (competing) interests of multiple stakeholders under joint service delivery" (Voorn et al., 2019, p. 671). Brandsma and Schillemans (2013) describe three different types of accountability relationships in public reform that politicians and bureaucrats hold: legal, professional (which I refer to as hierarchical in this paper), and political. Legal accountability entails contract-based relationships that can take the form of results-based financing or performance contracts. Professional or hierarchical accountability refers to relationships between supervisors and their subordinates with official reporting lines or hierarchies across administrations, which can be delineated through formal and informal reporting lines. Finally, political accountability can exist between political appointees and the institutions or positions that make those appointment decisions. Alternatively, political accountability can exist between citizens and civil organizations and their politicians. A delivery unit can establish all three types of relationships, depending on how it is designed and where it sits (see Mansoor et al., 2021). Given that other stakeholders in education reform also hold those types of relationships, and they cannot be easily replaced, the creation of a delivery unit can potentially lead to an even more complex accountability dynamic.

Instead of streamlining accountability, a delivery unit can further confound it. In other research on multiple accountabilities, this consequence is referred to as the "accountability paradox" (Connolly & Hyndman, 2017). Given the structure of the education system in Jordan, where donors and multiple public institutions are involved in reform, the emergence of multiple accountability relationships within the sector would be expected and could lead to implementation challenges such as duplication of effort and project delays. The examples of reform described in the paper are used to illustrate whether and how this hypothesis holds in the context of Jordan's education reform between 2010 and 2019.

Most existing research on delivery approaches or units is primarily found in practitioner-oriented or policy-focused literature and forums. The perceived successes of delivery units in capitalizing on accountability to boost performance have been recorded in various policy publications, including the 2018 Delivery Associates report on key success factors in delivery units in a select number of countries. Other publications include Gold's 2015 and 2017 mapping of delivery units and Oxford Policy Management's (OPM) 2016 report on delivery units around the world, among other case-specific accounts provided by the Centre for Policy Impact and similar online repositories. Some of these reports discuss factors that might undermine the delivery unit's impact on implementation, including the strength of political sponsorship, the frequency of accountability routines, the culture of collaboration across the delivery chain, and the enforcement of sanctions (e.g., Barber, 2013, 2015; Barber et al., 2011; Brinkerhoff, 2004; Gold, 2014, 2017; Allesandro et al., 2014; Delivery Associates, 2018). However, salient political economy factors that moderate the accountability mechanism introduced by a delivery unit have not been studied comprehensively. The consequences of multiple accountabilities in the context of a delivery unit, and, more specifically, within a political system with two de facto executive governments, have also not been systematically explored.

Photographs: © UNICEF Jordan

1.2 Conceptual framework and research questions

Various studies have documented the different functions performed by implementation solutions such as delivery approaches. These studies include policy reviews by the World Bank, Centre for Policy Impact (CPI), Oxford Policy Management (OPM), Delivery Associates (DA), and others showcasing models of effective service delivery (see Gold, 2015, 2017; CPI, 2016). There has thus far been little standardization of the definition of a delivery approach. However, international education and public administration experts have more recently sought to formalize the definition of a delivery approach to provide a common language and analytical lens through which researchers can assess a delivery approach's effects. Williams et al. define a delivery approach based on a systematic review of nwdckjbnthe literature on public administration, implementation science, and

education reform. They define a delivery approach as "an institutionalized unit or structured process within a government bureaucracy that aims to rapidly improve bureaucratic functioning and policy delivery by combining a set of managerial functions in a novel way to shift attention from inputs and processes to outputs and outcomes" (Williams et al., 2021, p. 8). These delivery approaches are typically introduced at the apex of a government institution, whether at the central or federal level or within a subnational authority. The management functions entailed in a delivery approach include: 1) target-setting and prioritization; 2) introducing incentives and accountability; 3) monitoring and measuring bureaucratic performance and the implementation process; 4) problem-solving and organizational learning; and 5) political signaling for targets adopted as priorities by the political leadership (Williams et al., 2021, p. 8). As most of these approaches take the form of a unit, this paper uses the term "delivery unit" throughout its discussion.

A delivery unit does not necessarily have to perform all five of these functions at once; it can combine at least two or three of these practices to improve the policy implementation process. Delivery units typically involve the first three functions mentioned above, as observed in a recent mapping of delivery units worldwide by Mansoor et al. (2021). A popular model can be found in UK's PMDU, which was convened by Tony Blair in 2001 to monitor and enhance the delivery of the government's 17 priority reforms (e.g., Gold, 2015). The PMDU's key innovation in public management lay in its routine monitoring and reporting on task performance and progress, combining data-driven administrative processes with high-level stakeholder management to signal political priority and urgency. While this model pioneered many of the approaches we see across governments today, it is not the

only approach; however, it is the most popular.

Using this conceptual framework for defining and understanding a delivery approach or unit, this case study aims to explore two questions related to the role of delivery units in leveraging accountability for better outcomes:

1. How did the introduction of delivery units in Jordan affect the dynamic of public service delivery and accountability for results?
2. What were the consequences of introducing delivery units in Jordan to leverage accountability on results?

1.3 Contributions to the literature on delivery units

Given that there is little academic literature on the effects of delivery units on implementation overall, studies of delivery units and their role in exacerbating multiple accountabilities is similarly scarce. Little academic and policy literature exists on how the political economy landscape of accountabilities moderates the effects of the levers—especially accountability—used by delivery units to enhance implementation. Moreover, the behavioral implications of political dynamics underlying the operations of a delivery unit are only explored in policy-oriented writings. There is a dearth of evidence around the effectiveness of delivery approaches in enhancing policy implementation, and there is even less information available on how pre-existing political economy features moderate the impact of a delivery approach. The politics of delivery units, namely the power distribution and relationships that govern the reactions that bureaucrats have toward delivery units, remains under-studied in the academic literature. This paper explores the consequences of a delivery unit failing to mute other accountability relationships in a given reform space and, instead, operating as another principal to whom agents must report.

The existing case studies on delivery approaches, such as delivery or implementation units, do not discuss the implications of other legal, financial, or career-related arrangements that hold agents accountable to stakeholders other than the delivery unit and its political sponsor. There is a body of gray literature that discusses the importance of introducing a delivery unit in close proximity to a political sponsor to leverage that hierarchical and political authority in monitoring implementation and providing bureaucrats with the incentive to respond to the delivery unit's guidance (e.g., Gold, 2014, 2017; Allesandro et al., 2014; Barber, 2015). However, these case studies fall short of explaining the factors that might cause a delivery unit to fail or succeed in performing such a function. Furthermore,

there is no existing documentation of the evolution of delivery units in Jordan's education sector.

The findings of this case study contribute to the academic conversation around the consequences of multiple accountabilities, adding perspectives emerging from the study of delivery units in public sector reform as a solution to the implementation challenges that governments face. The study describes certain consequences of introducing a delivery unit which confounds multiple accountabilities for policy implementation, highlighting the contextual features that moderate the effects of these consequences on reform results. Finally, the study provides the first comprehensive narrative of the evolution of delivery units in Jordan's education sector between 2010 and 2019.

Section 2: Context and methodology

To explore the theoretical questions identified in the previous section, this study relies on Jordan's education sector as a case study, examining the dynamics and consequences of introducing a delivery unit (or multiple units) to enhance implementation efforts. I look at the interplay between the delivery unit's role of ensuring accountability for results and the pre-existing arrangement of the system, including the political economy features that moderate the outcomes of that interaction. Jordan's education reform was selected as a case study for four reasons. First, Jordan's education sector has undergone multiple reforms since the early 2000s, and the learning outcomes have remained stagnant (Brombacher et al., 2012; Tweissi et al., 2015; NCHRD, 2016; OECD, 2018), thereby exhibiting certain shortcomings in implementation efforts. Second, Jordan's most recent response to its implementation challenges in the education sector has been the adoption of a delivery unit housed within the Royal Hashemite Court (RHC), which was primarily intended to enhance accountability for results (NCHRD, 2016). Third, Jordan's particular political economy poses an interesting dynamic in service delivery due to the existence of two executives with constitutional policymaking power (the RHC and the executive government). Fourth, Jordan's education sector has attracted significant multi-stakeholder investment. Interest in the development and implementation of educational policies and programs has increased, especially following the influx of Syrian refugees in 2012. This influx has created a saturation, and the effects on implementation are interesting for research.

[3] At the time the field research was conducted and the working paper was written.

This case study relies on semi-structured interviews with 37 key informants, including various government, non-governmental, and international stakeholders involved in education reform in Jordan. The study also relies on document analysis of national strategies, education sector plans, evaluation reports, and coordination briefs issued between 2010 and 2019. The bureaucrats and politicians who were interviewed came from three main public agencies: the Ministry of Education (MOE), the Prime Minister's Office (PMO), and the RHC. All but six of the interviews were conducted in person. The interviews conducted remotely were carried out through videoconference calls. The majority of the interviews were conducted between July and August 2019, with select follow-up interviews carried out between 2020 and 2021.

The interviewees were selected following a mapping of the delivery units in the country and key stakeholders in the education sector. Certain interviewees were selected on the recommendations of ministry officials and donor agencies as individuals who were directly or indirectly involved with one or more of the delivery units. Donors that funded single projects or small-scale reforms were not included in the study; the interviews primarily focused on stakeholders with a long-established relationship with the MOE and who worked closely with the delivery units in Jordan. The participants in the research were given the option of remaining anonymous. To protect these participants' anonymity, the case study excludes any identifying information that could link back to the participants, including direct quotations. For those who gave consent to participate non-anonymously in the study, I include their information in the citations where direct quotations or collective findings are cited.

The interviews with government bureaucrats were conducted in colloquial (Jordanian) Arabic and transcribed to formal written Arabic. The transcripts were not translated into English. The interviews with some of the informants from the NGO sector and previous staff of the delivery units were conducted in both English and Arabic, often switching from one language to the other over the course of the interview. The interviews with donors and INGOs were conducted in English. Due to the differences between colloquial and formal Arabic, I relied on the audio recordings to conduct the analysis. I conducted the analysis manually, relying on the field notes, transcripts, and audio recordings. Repeated themes were documented from these sources, which then informed the ex post facto coding protocol, which included organizing the emerging findings from the interviews into constructs based on

[4] The quality of the transcripts of the interviews that were conducted in both English and Arabic was poor due to the insufficient availability of transcribers who were proficient in both languages and could accurately transcribe the conversations, which frequently shifted from one language to another. I therefore relied mainly on the audio recordings for the analysis.

concepts in the accountability literature.

The case study focuses on four main areas of reform based on repeated mentions in the interviews: initial teacher education; teachers' policies; curriculum and assessment; early grade learning interventions; and decentralization of school improvement. These reform areas were salient across all the interviews that were conducted with education bureaucrats and external stakeholders; they were also the most easily corroborated through the document analysis. The paper only includes examples of reform areas which were triangulated through multiple sources—either three different interviews or two interviews with supporting documentation.

This research analyzes the findings emerging from the informant interviews and the document review through an inductive approach. The analysis was based on the grounded theory approach, whereby the data was collected using theory-informed interview protocols, and the analysis was carried out simultaneously with the data collection, highlighting salient and repeated themes across all of the sources. The interview protocols were refined based on the initial set of interviews with government officials and donors, which highlighted the dominant themes that pertain to the dynamic between delivery units and pre-existing accountability relationships in the sector. The codebook used to analyze the interview data was developed based on the conceptual framework of Williams et al. (2020), and categories from the accountability literature were further refined inductively, based on emerging data and the trends observed across data collected from multiple sources (see Annex A). The development of the analytical constructs relied on both the existing theoretical literature on delivery units and accountability and repeated rounds of decoding the interview data to extract the salient themes and emerging theoretical questions of interest.

I identified three main delivery units in Jordan's education sector that operated between 2010 and 2019: the Prime Minister's Delivery Unit (PMDU) at the Prime Minister's Office (PMO), the Results and Effectiveness Unit (R&E Unit) at the Royal Hashemite Court (RHC), and the Development Coordination Unit (DCU) at the Ministry of Education (MOE). While the PMDU and R&E Unit were both set up as delivery units to operate at the national level across multiple sectors, the DCU was a coordinating structure within the MOE that functioned as a de facto unit, performing most of the functions associated with a delivery approach. Unlike the other delivery units, the DCU had a single-sector remit. The case study investigates the dynamics of accountability in education reform and explores its implications on implementation

given the simultaneous existence of three delivery units and multiple external stakeholders that hold their own accountability relationships with the MOE through political capital, performance reviews, conditional funding, or results-based financing contracts.

Section 3: The introduction of delivery units in Jordan's education sector

This section presents a brief historical narrative for the establishment of the three delivery units identified in Jordan's public education sector between 2010 and 2019, including the PMDU, the R&E Unit, and the DCU. I provide an overview of the stated motivations behind the establishment of each of the units, as well as some of the contextual arrangements that explain where and why each of the units was established. I construct a timeline of when each delivery unit was introduced, situating each of the units within the context of the specific strategy or sector plan they were meant to implement. Furthermore, this section describes the accountability relationships that each of the delivery units and external stakeholders, such as donors, held with ministry personnel and other service providers in the sector, outlining the nature of these relationships (e.g. political, hierarchical, and/or legal) and the channels of enforcement (e.g. reporting upstream, career-related incentives, results-based financing, etc.). This descriptive overview reveals the intention behind the introduction of the delivery units in Jordan and the focus on monitoring, reporting, and accountability for each of the three different units.

3.1. The origins of delivery units in Jordan's public education sector between 2010 and 2019: A demand for stronger accountability

The demand for stronger accountability for learning outcomes in Jordan's education sector emerged from the perceived shortcomings of past reform efforts and ambiguity in the ownership over these results (NCHRD, 2016; RC01, July 2019; Dr. Omar Razzaz interview, July 20, 2019). With the heavy investment in Jordan's education sector by both the national government and donors, it was a pressing concern for policymakers and development practitioners that learning outcomes were still not reflecting the aspirations communicated through each national or sectoral strategy since the earlier 2000s. This puzzle was not unique to Jordan; it has plagued many low- and middle-income economies worldwide (Education Commission, 2016). World Bank appraisals of previous reform efforts funded through their Program-for-Results operations in Jordan characterized the

implementation of the first phase of the Education Reform for the Knowledge Economy project (ERfKE I) as satisfactory and the implementation of the project's second phase, ERfKE II, as moderately satisfactory (World Bank, 2009, 2017).

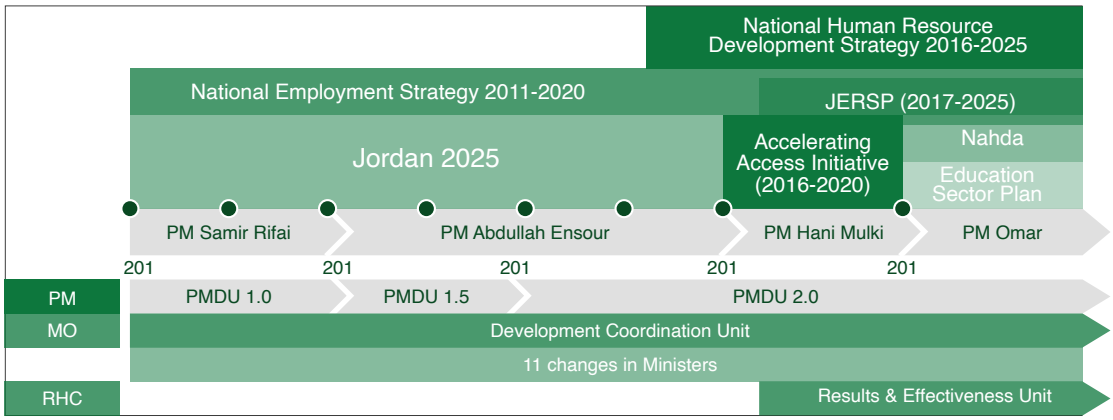
The decision to adopt a delivery unit—albeit by different institutions and with little synchronization or coordination—to monitor Jordan's education sector reform was made in light of the six different national strategies, three education-specific reform plans and over $900 million in donor funds that had not yet achieved their desired learning outcomes (NCHRD, 2016; MOE, 2018; World Bank, 2017). Furthermore, the education sector underwent 11 changes in ministers, which was recognized as a major challenge to which bureaucrats, donors, and service providers struggled to adapt (NCHRD, 2016; RC01, July 2019; DC03, July 2021; DC02, July 2019). Figure 1, below, illustrates the timeline for the development and implementation of various strategies and delivery units, as well as the transitions in government administration. The figure presents the establishment of three different units either exclusively or partially dedicated to monitoring education reform in Jordan between 2010 and 2019. Only one of these units was housed within the MOE to work exclusively on reform projects in the education sector.

3.1.1 The Development Coordination Unit (DCU)

The first delivery unit to be set up was the Development Coordination Unit (DCU) at the MOE. It was initially established as a donor project implementation unit in 2003 to monitor the implementation of ERfKE I (World Bank, 2003). After the assessment of achievements under ERfKE I, the donor community recognized the need for the DCU to become more embedded within the sector and for the ministry's organizational processes and structures to be coordinated across departments and drive nationally-driven education reform, therefore making it a de facto delivery unit by virtue of the management practices it carried out at the ministry (World Bank, 2017). The DCU's role between 2010 and 2019 evolved from that of Project Implementation Unit (PIU) between 2003 and 2009 after careful analysis by the donor community of the operational dynamics of education reform and a lesson learned that the ministry needed "to serve as the facilitator of change as opposed to being an implementer of change" (World Bank, 2009, p. 11). With this assessment, the donor community's orientation toward the DCU and its treatment of the unit shifted to allow for more of a leadership role within the MOE regarding the development and facilitation of the MOE strategic direction and reform efforts.

The initiative to assign the DCU more of a leadership role in education reform was

Figure 1: The Timeline for the Introduction of Delivery Units in Jordan's Education sector, 2010–2019



not the donor community's alone; it was also shared by the head of the DCU at the time, who was reported by several informants from the donor community to have proposed that the ministry shift from project-based, donor-led reform to an MOE-led sector-wide plan. The mobilization of stakeholders around the Education Sector Plan (ESP) was spearheaded by the DCU, which organized a roadmap to better service delivery in education that was more systematic than fragmented, as well as more locally than internationally driven (RC03, July 2019; DC02, July 2019). One detail illustrates the relative novelty of the mandate: across all interviews with stakeholders outside the MOE, the DCU's full name was thought to be the "Donor Coordination Unit" as opposed to "Development Coordination Unit." This reflects the fact that for a long time, the DCU's primary function was to report to donors and manage their projects as opposed to coordinating sector-wide coherent and systematic reform. Starting in 2017, the DCU led the coordination of donors and aligned them toward common reform goals.

3.1.2 The Prime Minister's Delivery Unit (PMDU)

The second delivery unit to be set up was Jordan's first Prime Minister's Delivery Unit (PMDU), which was established in 2010 within the Prime Ministry as an ad hoc structure tasked with monitoring the implementation of government priorities. This unit was given a cross-sectoral mandate and followed up on national plans. The PMDU was set up within the Prime Minister's Office (PMO); it had, and continues to have as of this writing, a cross-sectoral mandate as opposed to a mandate focusing solely on education. The PMDU was established in 2010 under Prime Minister Samir Al-Rifai's administration and tried to emulate the UK PMDU model to ensure effective implementation of the government's priorities (Basheer Salaita, July 2019; Dr. Tareq

[5] Three different individuals served as PM between the tenures of Samir Rifai and Abdullah Ensour. As each of them held office for less than a year, I excluded them from the figure for simplicity.

[6] It is important to note that the leadership of the DCU also significantly influenced the role that the unit played in education service delivery. Strong leadership between 2009 and 2019 ensured that the DCU acted as a problem solver rather than merely a facilitator.

Arikat, August 2019; Mohannad Rawashdeh, July 2019). The first head of the PMDU, Dr. Tarek Arikat, has said, "when we [the PMDU] started the delivery unit . . . he [the PM Sami Al-Rifai] understood the importance of having a unit similar to what they have in 10 Downing Street that would follow up on important government country initiatives" (Dr. Tareq Arikat, August 2019).

The PMDU underwent several revisions to its structure, staffing, function, and mandate between 2010 and 2019. As Figure 1 illustrates, each new PM introduced a new vision and approach to operationalizing the PMDU's mandate. Between 2010 and 2012, the PMDU was not an institutionalized part of the organizational structure of the PMO (PMO, organizational chart, n.d.). The staff of the PMDU during that time consisted of consultants recruited by the PM directly through a competitive process (Basheer Salaita interview, July 2019; Dr. Tareq Arikat, August 2019). This lack of institutionalization meant that the PMDU was frequently sidelined in cabinet meetings. It was not until 2014, with the Dr. Abdullah Ensour administration, that the PMDU was integrated within the organizational hierarchy and staffed through the civil service instead of external consultants (Dr. Tarek Arikat, August 2019; PMO, organizational chart, n.d.). This institutionalization was meant to strengthen the PMDU's function as an oversight structure that held the relevant ministries accountable for their sectoral key performance indicators (KPIs) vis-à-vis the political sponsorship of the PM, as well as its reporting lines and position within the bureaucratic hierarchy.

The organizational integration of this delivery unit into its host agency was instrumental for its functioning in Jordan. When the PMDU was merely an ad hoc structure, cabinet meetings easily disregarded the PMDU's role in facilitating cross-sectoral policymaking and implementation and often kept their contributions in such routine meetings at the margins (Basheer Salaita interview, July 2019; Dr. Tareq Arikat, August 2019). In later years, the PMDU's main challenge was not its lack of bureaucratic and hierarchical legitimacy in holding the relevant ministries accountable. Its challenge was rather its overwhelming mandate of following up with over 120 public agencies; its having over 100 KPIs also prevented it from engaging meaningfully in the implementation process and challenges of any single sector or relevant ministry—a challenge that had persisted from its inception in 2010 (Basheer Salaita, July 2019; Dr. Tareq Arikat, August 2019; Mohannad Rawashdeh, July 2019). Understandably, when asking the MOE staff about the contribution of the PMDU to education reform, none of the interviewees indicated that the unit provided

significant support or played a role aside from collecting monthly updates to report upstream (Arab Yahia, August 2019; Hind Hindawi, July 2019; Dr. Khawla Khattab, August 2019). The latest iteration of the PMDU, however, did pioneer the government's first public-facing public reform performance dashboard, which routinely published data to reflect government progress toward priority targets (Mohannad Rawashdeh, July 2019).

Photographs: © UNICEF Jordan

[7] The link to the online dashboard from 2019 no longer works.

3.1.3 The Results and Effectiveness Unit (R&E)

The second delivery unit to be established was the Results and Effectiveness Unit (R&E Unit) within the Royal Hashemite Court (RHC). In 2016, the Human Resources Development Strategy (HRD) for 2016 to 2025 was launched by the National Committee for Human Resource Development (NCHRD). This committee was convened by King Abdullah II to develop a national vision and roadmap for education reform, from early childhood education to tertiary education, including technical and vocational education and training (TVET). To ensure the successful implementation of the HRD strategy, the NCHRD recommended the establishment of a delivery unit within the RHC to ensure accountability for the results regardless of changes in government, which were frequent between 2010 and 2019 (see Figure 1).

As stated in the HRD strategy, the R&E Unit was intended to be "the full-time delivery capacity of the HRD Reform Board - to act as a watch-dog on the entire HRD reform and to drive results" (NCHRD, 2016, p. 36). The unit's mandated function was twofold: 1) monitoring the progress of implementation and 2) providing analytical and technical support for the implementation teams at the MOE to resolve capacity issues and delivery challenges (NCHRD, 2016). The HRD outlined the role of the R&E Unit, stating that "the Unit will include a monitoring and evaluation function and an analytical function to assess progress and benefits realization. In addition, and to ensure that this Unit is dedicated to delivery not just monitoring, the Unit should have the ability to resolve implementation bottlenecks and constantly seek solutions with implementing Ministries and other stakeholders" (NCHRD, 2016, p. 217).

The R&E Unit was set up within the Economic Development Directorate at the RHC and was tasked with following up on reform priorities within the basic and secondary education, higher education, and the technical and vocational education and training (TVET) sectors. These priorities were selected from the list of recommended reforms outlined in the 2016–2025 National Human Resources Development (HRD) Strategy. The R&E Unit reported directly to the head of the Economic Directorate within the RHC, as well as to King Abdullah and Queen Rania. The unit had a direct line of communication with the Minister of Education and followed up routinely through weekly meetings. The unit prepared updates for the quarterly meetings with King Abdullah and Queen Rania's offices and conducted ad hoc meetings with education bureaucrats over key priority areas that were of interest to the RHC and which aligned with the HRD strategy (Hafs Mallouh, July 2019; Dr. Khawla Khattab, August 2019; Hind Hindawi, July 2019; RC01, July 2019).

Table 1 reflects the evolution of each of the delivery units and the functions that they performed between 2010 and 2019. The gap between the units' intended and actual functions is an indication of the evolution that was made necessary by the political economy of education reform. Each unit needed to adapt to better achieve its intended goals; the units also needed to adapt to navigate the multitude of players in the education ecosystem and adopt functions in which they had the comparative advantage. The way in which each unit adapted is indicative of the relative effectiveness of the design choices made for the setup and operation of the unit in question. For example, while the PMDU was intended to leverage accountability and problem-solving to enhance implementation across ministries, it did little of this—especially after its initial waning novelty and political support from the prime minister (Basheer Salaita, July 2019; Dr. Tareq Arikat, August 2019). The DCU, on the other hand, was frequently cited by education bureaucrats as a source of technical advice and problem solving when it came to implementation challenges. The DCU's proximity, both physically and relationally, to mid-level bureaucrats within the MOE enabled it to perform this problem-solving function more effectively than other delivery units with weaker links to the civil servants across the delivery chain. When it was first established, the R&E Unit was involved in problem solving with bureaucrats; however, this function evolved into more routine monitoring and high-level coordination with other ministries to facilitate funding, legislation, and project clearances.

Table 1: Intended Versus Actual Functions of Delivery Units in Jordan

Delivery Unit	Target-setting and prioritization		Monitoring and measurment		Accountability and incentives		Problem solving and organizational learning		Political signaling	
	Intended	Actual	Intended	Actual	Intended	Actual	Intended	Actual	Intended	Actual
DCU	✓	✓	✓	✓		✓		✓		✓
R&E Unit	✓	✓	✓	✓	✓	✓	✓		✓	✓
PMDU	✓	✓	✓	✓	✓		✓		✓	✓

This information was synthesized from interviews with individuals who were tdirectly and indirectly involved in these delivery units, as well as internal slide decks from the DCU on its function. The above was also drawn from the 2016 Human Resource Development (HRD) strategy.

The introduction of each of the delivery units identified in this study targeted specific failures in the sector's implementation process. The PMDU was introduced to normalize frequent public reporting against preset indicators and thereby continuously hold government actors accountable to the public for their performance (Dr. Tarek Arikat, August 2019; Basheer Salaita, July 2020; Omar Al-Razzaz, July 2019). In one of its more recent iterations, in 2019, the PMDU was also meant to "nest and harmonize [the existing] accountability system" (interview with then-prime minister Dr. Omar Al-Razzaz, July 2019). The R&E Unit was introduced to navigate the unpredictable and frequent transitions in government (NCHRD, 2016). The DCU was initially introduced as a type of Project Implementation Unit (PIU) for the World Bank-led ERfKE I strategy, which later became a multi-donor education reform plan (World Bank, 2003, 2009, 2017). The DCU transformed into a central coordinating structure for all education-related reform projects, as its name indicated, monitoring and approving any and all proposed investments to enhance the quality, access, and governance of education in the public sector (Hind Hindawi, July 2019; World Bank, 2009; Najwa Qubeilat, August 2019; DCU, ESP coordination structure, n.d.).

3.2 The organization of education policy making and service delivery in Jordan

3.2.1. The role of public agencies in education service delivery

The multiplicity of actors involved in education reform between 2010 and 2019 in Jordan was a function of the complex nature of education service delivery, which has typically involved not only several ministries but also third-party service providers in charge of different inputs and outputs related to learning and teaching processes. The mandate of education service delivery had extended beyond the ministry's purview. Over 12 donors are involved in the sector, and high-level responsibility for the results had expanded across three different public institutions: the Ministry of Education, the Prime Minister's Office, and the Royal Court (MOE, 2018; NCHRD, 2016). The chain of command had not always been clear across this seeming political pyramid.

While King Abdullah is given executive powers in the Jordanian constitution, the Royal Court has often tried to take a back seat, given the political sensitivities around its direct involvement in policymaking and implementation and the country's direction

toward government-run reform as opposed to policymaking by royal entities (RC01, July 2019; RC02, July 2019; Dr. Mazen Abu Baqar, July 2019; Dr. Omar Al-Razzaz, July 2019). However, the relative stability of the Royal Court compared to the frequent—and often unpredictable—changes in government administration was presumed to be more conducive to long-term policymaking and continuity in reform agendas (NCHRD, 2016). The decision to adopt a delivery unit within the RHC was somewhat paradoxical, given the RHC's commitment to distancing itself from policymaking in government. This resulted in a complicated case of simultaneous active involvement and passive monitoring, which often confused accountability lines—especially in reform areas that were politically sensitive and attracted public or teachers' union scrutiny, such as teacher licensing and curriculum reform. It was also counterproductive in some reform areas where the involvement of the R&E Unit hit roadblocks when the challenges went beyond financial, legal, and logistical bottlenecks, but originated from political opinions regarding the content of the reform itself. The former director of the DCU has said, "the fact that this delivery unit [the R&E Unit] is placed in the Royal Court means that it's not in the government . . . it doesn't have a lot of arms; it doesn't have a lot of teeth" (Hind Hindawi, July 2019).

Despite the motivations to achieve better implementation outcomes, these various delivery units in some cases complicated implementation rather than enhancing it. Considering each unit, the functions that were performed aligned well with the design intentions of the policymakers who introduced them (see Table 1). However, with little adaptation to pre-existing reporting dynamics and political sensitivities about the RHC's interference with bureaucratic processes, the design of the functions across these units struggled to ensure complementarity and synergy to streamline reporting and accountability for outcomes.

3.2.2 The role of donors in education service delivery

In addition to these three public institutions, education reform projects have been typically co-financed and managed through multilateral reform plans involving donors, INGOs, and local organizations that provide various types of support to the MOE. The MOE has received technical assistance, policy advice, research support,

[8] One of the notable efforts of the delivery approaches introduced in the education sector in Jordan between 2010 and 2019 was the attempt the DCU made at aligning the KPIs and funding across strategies and donor funding plans. Previously, donors had funded pre-planned projects (e.g. ERfKE I and ERfKE II) based on their own assessment of the gaps and needs of the sector. The adoption of the HRD strategy and the impact of the Syrian crisis on the capacity and quality of Jordan's formal education system provided the impetus for coherence across stakeholders to streamline and rationalize their spending and implementation efforts (Allyson Wainer interview, July; Hind Hindawi interview, July 2019; DC01, July 2019; MOE, 2018). Both the R&E Unit and the DCU played critical roles in mobilizing support for a more streamlined process of assessing sectoral needs and matching the ministry's targets with the appropriate funding and technical assistance. Though not intentionally coordinated, their efforts were rather complementary in ensuring that ad hoc projects were kept to a minimum and budgetary support was channeled into ensuring the implementation of the ESP.

funding aid, and implementation assistance from these various organizations. Table 2 provides a brief summary of the main reform plans that were adopted between 2010 and 2019.

There were four main sector plans or strategies that governed education reform between 2010 and 2019, some intersecting with one another and others succeeding previous plans. Between 2009 and 2016, the primary sector plan was the second phase of the Education Reform for the Knowledge Economy (ERfKE II), which was spearheaded by the World Bank, but also involved other donors such as the Global

Table 2: Education Reform Plans, 2010–2019

Delivery Unit	Target-setting and prioritization	Monitoring and measurment	Accountability and incentives
ERfKE II (2009–2016)	12 donors, including the following major contributors: World Bank, Global Affairs Canada (GAC), USAID	$408 million	Curriculum reform; teachers' professional development; student assessment; information and communication technology (ICT) in education; early grade reading; school construction
ERSP (2009–2014)	USAID	$45 million	School construction; early childhood education; youth, technology, and careers; professional development and credentialing [for teachers and principals]; decentralization and school-based management
JERSP (2017–2025)	World Bank	$200 million	Early childhood education; curriculum and student assessment; teacher evaluation and credentialing; Syrian refugee education
ESP (2018–2022)	Over 7 donors, including the following major contributors: World Bank, GAC, USAID, and FCDO	$209 million approximately in off-budget support for 2018 $1.3 billion in MoE actual expenses in 2018 $202 million approximately in off-budget support in 2019 $1.3 billion in MoE actual expenses in 2019	School construction; early childhood education; curriculum reform; teachers' professional development and credentialing; ICT in education; Syrian refugee education; information systems and systems strengthening

Sources: MoE, 2022; World Bank, 2017; MoE DCU, 2014

Affairs Canada (GAC) and USAID. ERfKE was a comprehensive reform plan that tackled various components of the education system, including teachers' professional development, curriculum reform, education technology, data collection and monitoring, and school development. Intersecting with ERfKE II was the USAID's ERSP, which focused on early childhood development (ECD), youth, technology and careers, teacher preparation and school environment, and the role of data in decision making (USAID, 2014). After the close of ERfKE II, the World Bank renewed its funding for Jordan's reform efforts and developed the 2017–2025 Jordan Education Reform Support program (JERSP) , which picked up from where ERfKE II left off, expanding on teaching and curriculum quality, as well as other system-strengthening projects, including teacher evaluation, data management systems, and human resources.

3.2.3 The routines, sources, and channels of accountability in education reform, 2010–2019

implementation process for education reform, it is important to describe the key players and how they established accountability with ministry bureaucrats. In other words:

- Who held bureaucrats to account for implementation results, both formally and informally?
- What source(s) of legitimacy justified these relationships?
- What kinds of routines enabled them to perform that accountability function?

The multiplicity of delivery units and reform oversight bodies corresponded to different—and often multiple—channels and sources for accountability. Table 3 shows the types of accountability relationships that existed within the education sector between 2010 and 2019. Different stakeholders leveraged various types of accountability relationships, sometimes multiple types across various contexts. Table 3 highlights which stakeholders were involved in different reform projects and describes how they exercised their oversight of the implementation and reporting. Table 3 also highlights the nature of the accountability relationships that each of these stakeholders, including the delivery units, held with the bureaucrats and service providers in education.

The delivery units and other stakeholders held three types of accountability relationships with bureaucrats, described here in line with Brandsma & Schillemans' (2013) framework. First, there was the legal form of accountability represented through preset Disbursement-Linked Indicators (DLIs) or deliverables-linked payments outlined in legal contracts. Second, there was political accountability manifested in implicit career-related decisions regarding the tenure of a political appointee. This political accountability was either channeled top-down, whereby the RHC's power in appointing the PM leveraged political accountability over public sector outcomes, or it was channeled from the bottom up whereby civil society and other organizations, like the teachers' union, mobilized to demand better outcomes or changes in government administration. Third, there was hierarchical accountability embedded within organizational reporting lines and HR performance appraisal processes among civil servants. This type of hierarchical relationship existed not only between civil servants but also between government or public institutions—for example, between the Prime Ministry and the relevant ministries, where the latter reported upstream to the Prime Minister's Office. There was also an

implicit hierarchical relationship between the RHC and both the PMO and the relevant ministries. Each of these relationships were channeled in different ways. For example, political accountability between the PMO or RHC and the relevant ministries was exercised through upstream reporting routines and perceived threats to professional reputation and esteem, in additional to credible threats to the political appointees' longevity in office (RC01, July 2019; Dr. Tarek Arikat interview, August 8, 2019).

Hierarchical accountability was channeled through career-related incentives, such as promotions or re-assignments to different departments; this may have occurred through bureaucratic HR processes or through the appointment power that the RHC had over prime ministers and other ministers. Finally, legal accountability was channeled through contracts, commonly linked to financial disbursements upon proof of project completion and achievement of KPIs. These contracts were commonly held between donors and the government or between the service providers and the donors or governments.

Table 3: Accountability Channels and Routines Vary Across Delivery Units and Stakeholders

Unit/Stake Holder	Design & Functions			
DCU	Mandate	Manage all donor funded projects, as well as ensure the implementation of the ESP		
	M&E Routines	Monthly Policy, Planning, and Coordination Committee (PPCC)	Accountability channel	Reporting upstream
		Monthly Technical Working Group (TWG) meetings		
		Quarterly Steering Committee meetings		
		Bi-annual High-Level Steering Committee meetings		
		Annual Narrative Report		
		More frequent ad hoc meetings with departmental staff to discuss daily implementation progress and challenges		
	Incentives	Reputation/esteem	Accountability loci	Hierarchical (between departments)
		Job security (bureaucrats)		
		In practice, bureaucrats would not get fired but they might be re-assigned to other departments to reduce disruption to the implementation process.		

R&E Unit	Mandate	Ensure the implementation of the priorities listed in the Human Resource Development Strategy (HRDS) 2016–2025.		
	M&E Routines	Weekly meetings with the minister	Accountability channel	Reporting upstream
		Quarterly meetings with King Abdullah, Queen Rania, and the minister		
		Ad hoc check-ins with MOE staff and other stakeholders		
	Incentives	Reputation/esteem	Accountability loci	Political
		Job security for the minister		Hierarchical (between institutions)
PMDU	Mandate	Ensure the implementation of national priorities, across all sectors and public agencies		
	M&E Routines	Monthly	Accountability channel	Reporting upstream
		Annual Report		Reputation/Esteem
		Online dashboard (public)		Career-related incentives (for political appointees)
	Incentives	Reputation/esteem	Accountability loci	Political
		Job security (Minister)		Hierarchical (between institutions)
World Bank	Mandate	Ensure the implementation of World Bank programs: ERfKE I, ErfKE II, and JERSP		
	M&E Routines	Annual missions	Accountability channel	Results-based financing
		Aide-memoirs		
		Education dashboard		
		Audit reports		
		P4R framework		
	Incentives	Disbursement of funds (Disbursement -Linked Indicators)	Accountability loci	Legal
FCDO	Mandate	Ensure the implementation of DFID programs under (EDRIL) & AAS		
	M&E Routines	Partake in DCU-organized meetings	Accountability channel	Results-based financing/ deliverables-linked financing (service provider contracts, supplementing other donor funds)
		Co-chair of EDG		
	Incentives	Disbursement of funds linked to contract deliverables with service providers	Accountability loci	Legal
GAC	Mandate	Ensure the implementation of programs agreed under off-budget and direct budget support and JERSP		
	M&E Routines	Third-party program evaluators	Accountability channel	Results-based financing/ deliverables-linked financing (service provider contracts, supplementing other donor funds) **It is important to note that GAC typically identifies gaps in capacity and invests in building it rather than withholding funds.
		DCU M&E (in practice)		
		Research and Strategic Planning department (in theory)		
	Incentives	Disbursement of funds linked to contract deliverables with service providers	Accountability loci	Legal

USAID	Mandate	Ensure the implementation of USAID programs & JERSP		
	M&E Routines	Third-party program evaluators	Accountability channel	Results-based financing (service provider contracts)
	Incentives	Contracts with private service providers	Accountability loci	Legal
Queen Rania Foundation	Mandate	Inform policy and programs based on evidence		
	M&E Routines	Quarterly Steering Committee meetings	Accountability channel	Reporting upstream
		Quarterly workshops		Results-based financing (sub-contracting service providers)
		Ad hoc memos to the minister		Career-related incentives (for political appointees)
	Incentives	Link to RHC	Accountability loci	Political
		Link to Minister		Legal
Queen Rania Teacher Academy	Mandate	Ensure the implementation of World Bank programs: ERfKE I, ErfKE II, and JERSP		
	M&E Routines	Internal M&E	Accountability channel	Results-based financing
		DCU M&E		
	Incentives	Donor funding conditions	Accountability loci	Legal
		Link to RHC		Political
National Center for Curriculum Development (NCCD)	Mandate	Manage, monitor, and implement curriculum reform		
	M&E Routines	Steering Committee Meetings	Accountability channel	Results-based financing
		Direct line to Queen Rania's office		
		Direct line to PMO	Accountability loci	Legal
	Incentives	Link to RHC & PMO		Political
				Hierarchical (between institutions)
Teachers' union	Mandate	Advocate for teachers' career progression, working conditions, and status		
	M&E Routines	Media statements	Accountability channel	Public scrutiny
		Official press releases		
		Meetings with the minister		
	Incentives	Demonstrations	Accountability loci	Political
		Strikes		
		Media coverage		

The organizations affiliated with the government or the Royal Court typically held political and hierarchical accountability, while the donors held legal forms of accountability. The donors exercised their accountability with the ministry and service providers through deliverables-based contracts. While all stakeholders relied

on reporting upstream and drafting narrative reports to ensure accountability, the donors also tended to supplement these reporting routines with external evaluations to conduct unbiased assessments of project implementation and results. These evaluation reports ultimately fed into the planning and budgeting for future reform plans, thereby exercising indirect forms of accountability and creating incentives for bureaucrats. They conditioned the disbursement of funds based on the submission of deliverables or linking funding with indicators that the ministry had committed to achieving. Their main channel for operationalizing accountability for their reform projects was results-based financing, and, in some cases, third-party evaluations of implementation to inform future budgeting cycles (e.g., DCU, 2014; World Bank, 2016).

Among the NGOs affiliated with Queen Rania, the main sources of accountability were both political and legal. Their political form of accountability was grounded in their connection to the RHC and direct line of communication with the R&E Unit, as well as the minister. In some cases, they were funded to provide services (e.g. Queen Rania Teacher Academy) or technical assistance (e.g. Queen Rania Foundation); they therefore held legal accountability for the results through the deliverables-based contracts they held with subcontractors (i.e. consultants, service providers, etc.) (e.g., DCU, 2014; Hind Hindawi, July 2019; Hafs Mallouh, July 2019; MoE internal memo on teacher policies, n.d.). Other semi-autonomous or autonomous entities, like the National Centre for Curriculum Development (NCCD), held both political and hierarchical accountability relationships with the ministry. Their political accountability came from their direct link to the R&E Unit and the PMDU. Their hierarchical accountability was grounded in their legal mandate to manage, monitor, and implement curriculum and assessment reform in the country, thereby supplanting the previous mandate the MOE had had with regard to curriculum reform. Civil society also held the ministry accountable for reform—specifically, teacher policy reform. The teachers' union's source of accountability was political, channeled through its connection to the general public and its ability to mobilize teacher strikes, public scrutiny, and public demand for certain outcomes.

The sources, routines, and channels of accountability employed in the education sector are relevant to the discussion around multiple accountabilities and how the introduction of delivery units confounded such an implementation challenge. In the next section, these routines, sources, and channels of accountability are used to explain why and how the implementation of education reform between 2010 and 2019 resulted in some delays, the re-orientation of goals, and duplication of effort.

While these forms of accountability can explain some of the challenges of education reform in Jordan, they also explain some of the successes brought about by the involvement of a delivery unit that was able to streamline accountability and enhance implementation through such routines. The context in which a delivery unit was successful or ineffective in leveraging accountability to improve implementation is described in sections four and five.

Section 4: Effects of multiple accountabilities on policy and program implementation

The adoption of delivery units in a landscape of pre-existing accountability relationships and sensitive politics between two executives led to various consequences on project implementation, including task delays, duplications, and re-orientation. The task duplication and stalling can be observed by tracing the reform projects over time, across strategies, and within stakeholder implementation plans, including targets and timelines.

4.1 Many cooks, different recipes: Multiplicity of reform owners

Interviews with bureaucrats at the ministry indicated that the presence of various stakeholders who held some form of accountability for the results also meant the existence of multiple monitoring and evaluation frameworks against which administrators were measured, including indicators that were framed differently and targets that were not always aligned across frameworks (Hafs Mallouh, July 2019; Dr. Khawla Khattab, August 2019; Yousef Abu Shaer, August 2019). Reporting to various stakeholders was more than just time-consuming for bureaucrats; it also complicated their ability to stay on task for specific reform areas, since reporting was usually accompanied by a new set of instructions that sometimes conflicted with previous instructions from similar or different principals (Hafs Mallouh, July 2019; Dr. Khawla Hattab, August 2019). According to an interview with Dr. Khawla Hattab, at the Ministry of Education she had to "interact with stakeholders like the Prime Minister's Office, like the Royal Court; now [she had] multiple stakeholders that are taking the same information. This causes some kind of disruption and a misuse of authority."

Departments within the ministry often reported about similar projects using different information, based on principal preferences and requests. Table 4 below presents the various reform projects in which multiple stakeholders were involved, including both funders and implementers. As might be expected, duplicate information sharing

occurred without necessarily aligning the data sources. This often led to wasted time, unclear information flows, and conflicting perceptions of progress made under each reform area (Hafs Mallouh, June 2020; DC03, July 2021; USAID, 2020). This challenge was also reported in USAID's assessment of the monitoring and capacity gaps within the ministry (USAID, 2019).

The costs of such multiplicity went beyond efficiency losses due to monitoring costs. With each organizational monitoring and accountability framework came the costs of lobbying for specific visions and milestones for implementation. While the duplication of effort in reporting partly stemmed from shortcomings in the information-sharing, data ownership, and communication flows across departments (USAID, 2019), interviews with MOE personnel suggested that the reporting frameworks necessitated different adaptations of information to report on similar reform topics (Hafs Mallouh interviews, July 2019 and June 2020; Dr. Khawla Hattab interview, August 2019). The timelines for reporting to stakeholders did not always align, and neither did the types of information requested for various aspects of implementation progress. The opportunity cost of time spent by bureaucrats to meet the demands of both formal and informal reporting routines introduced by various delivery units and stakeholders was reported to be quite disruptive to the actual work done by staff to advance technical and operational activities (Hafs Mallouh, July 2019; Dr. Khawla Hattab, August 2019). Reporting routines and diverging requirements often depleted the MOE's limited time and financial resources, leading to challenges with project completion against set timelines and targets.

Having multiple reporting lines and frameworks led to a lack of clarity around who owned particular reform projects (USAID, 2019a). Despite efforts to institute a single monitoring and evaluation framework for the execution of the ESP, the multiplicity of organizational Standard Operating Procedures (SOPs) and target indicators for each individual donor and public agency, such as the PMO and the RHC (see Table 5), was a barrier for efficient monitoring and evaluation. Furthermore, third-party audits subcontracted by donors to evaluate the implementation and impact of their programs added further strain on MOE's bandwidth to respond to reporting, meeting, and data monitoring requests. As one of the key informants from the donor community stated, it "takes energy [from MOE staff] for them to serve our [donors'] needs for data and accountability" (Allyson Wainer, August 2019).

---

[9] "أنا بتعامل مع مؤسسة مثل وزارة التربية والتعليم بتعامل فيه عن جهات مثل الرئاسة، في مثل الديوان صار في عندي أنا متعدد جهات متعددة عمالها بتأخذ نفس المعلومة، هذا الحكي بيعمل نوع من التشويش، عم بيعمل نوع من الضغط واستخدام السلطة يما لا يثنى"

[10] The World Bank has acknowledged the challenge of having multiple monitoring and evaluation processes across donors and within the MOE in the project appraisal for ERfKE II. USAID's 2019 DEEP report confirmed that the problem persisted.

The monitoring function at the MOE had been a challenge since the launch and execution of ErfKE I. USAID's 2019 Data and Evidence for Education Programs (DEEP) report found that the roles and responsibilities for monitoring, evaluation, and learning (MEL) were fragmented across MOE The monitoring function at the MOE had been a challenge since the launch and execution of ErfKE I. USAID's 2019 Data and Evidence for Education Programs (DEEP) report found that the roles and responsibilities for monitoring, evaluation, and learning (MEL) were fragmented across MOE departments. Despite efforts to streamline the reporting process through the DCU, progress was stifled due to staffing constraints within the unit. However, this was not a recent phenomenon. Table 5 shows the reform areas that are heavily concentrated in stakeholder involvement, including teacher policy-related and curriculum reform. The proliferation of donors and service providers in Jordan's education sector became more pronounced after 2012, when the refugee crisis in Jordan generated a demand for greater funding and implementation support. The integration of efforts, while attempted and acknowledged as more efficient, was limited due to politics around budgetary support.

Photographs: © UNICEF Jordan

[11] The DCU's function seemed to be tied to the individual leading the unit, usually a consultant hired from outside the civil service. According to interviews with various donors and MoE staff, this leadership shaped the way in which the DCU managed education reform, determining whether the DCU enabled MOE staff to take ownership of the reform process or allowed donors to manage it instead. Changes in leadership also influenced the way in which this delivery unit interacted with others, especially the R&E Unit.

Table 4: Saturation, and Sometimes Duplication, Across Reform Areas*

Area Pillar	Target Area	Strategy/Plan					Stakeholders involved				
		ErfKE II 2009–2016	HRD (2016–2025)	JERSP (2017–2022)	ESP (2018–2022)	Nahda (2019–2020)	PMO	RHC	DCU	Donor	NGOs
ECD	ECD expansion		✓	✓	✓	✓	✓	✓	✓	✓	
	ECD enrollment		✓	✓	✓	✓	✓	✓	✓	✓	
	ECD accreditation & licensing		✓	✓	✓	✓	✓	✓	✓	✓	✓
Human Resources	Teaching standards	✓	✓	✓	✓			✓	✓	✓	✓
	Improve quality of initial teacher training		✓		✓		✓	✓	✓	✓	✓
	Teacher licensing by law		✓		✓	✓	✓	✓	✓		✓
	Teacher continuous professional development	✓	✓	✓	✓		✓	✓	✓	✓	✓
Quality	Modernization of national curriculum	✓	✓		✓	✓	✓	✓	✓		
	ICT in education strategy	✓	✓		✓	✓	✓	✓	✓	✓	✓
	ICT in schools and teaching	✓	✓		✓	✓	✓	✓	✓	✓	✓
	Reaching and Mathematics Project (RAMP)			✓	✓				✓	✓	✓
System Strengthening	School and Directorate Development Program (SDDP)				✓				✓	✓	✓

*The wording of the targets/KPIs might not match the exact phrasing in the different strategies since they are framed differently across documents. We include the broader goal in the table.

**This study does not delve into reform efforts around the inclusion of Syrian refugees in formal and non-formal education. Consequently, the paper does not include the various initiatives and strategies developed between 2010 and 2019 that target Syrian refugees more specifically.

4.2 With many targets came poor aim: The challenge of aligning reform plans, donors, and implementers

With so many organizations—each with their own set of technical expertise—working on delivering results under these reform pillars, the bureaucrats inevitably encountered multiple reporting demands and implementation instructions. This multiplicity can be first gleaned from the mapping of reform projects between 2010 and 2019, including the "reform owners" or reform funders for each of the projects (see Tables 4 and 6). For example, the development, adoption, and enforcement of the National Teacher Professional Standards has been a project dating back to ErfKE II in 2009, and it persisted until 2019 under the HRD, JERSP and ESP, as illustrated in Table 4. Similarly, curriculum reform has been an ongoing priority for the MOE since 2003. In 2016, all curricula were revised, and in the same

[12] This study looks at education reform between 2010 and 2019; any development beyond this time frame is outside the scope of this particular research.

year, the HRD strategy prioritized the reform of all curricula and started the process again. Teacher training was a common priority, shared by government agencies and donors alike; however, the different visions for how pre-service and in-service teacher training should be implemented created competition between stakeholders and negotiation battles that the DCU and RHC had to manage.

The persistence of reform across these policy areas was not in and of itself the problem at hand. It was rather the repeated disruption—and sometimes discontinuation—of projects under these policy areas and fragmentation of implementation oversight that gave rise to delivery failures such as task delays, reorientation, and duplication, which are illustrated in the examples provided in the next section.

Some reform projects that involved multiple stakeholders sometimes had different targets assigned by each stakeholder or reform plan, as shown in Table 6. Interviews with ministry officials highlighted that misalignment across monitoring and reporting frameworks imposed by the different stakeholders had been taxing the bureaucrats' time and ability to adhere to tasks and agreed-upon timelines. The mapping of targets and timelines in Table 6 illustrates that where a given delivery unit was able to streamline accountability, the targets were achieved on time. These initiatives tended to be projects that were solely funded by the government of Jordan. Most of these targets, however, were output-based, and they were successfully achieved due to the delivery unit's ability to resolve high-level bottlenecks, such as funding allocations and legislative approval (see section 5 for more details).

Table 5: Common and Divergent KPIs Across Strategies

Key Performance Indicators (KPIs)				
ErfKE (by 2016)	HRD (by 2020/21)	ESP (by 2020)	Action Plans by MOE departments [13]	JERSP (by 2020)
Percentage of new teachers who received initial teacher education				
	50% of new grade 4-10 teachers	50% of all new teachers	10% of all new teachers	N/A
Percentage of teachers achieving "good" evaluation against teaching standards				
NPTS adopted and 100% of teacher policies were revised to implement the standards	100% of teachers being evaluated against new certification and licensing system	40%	15%	0% (6,400 teachers, ~8% by 2025)
Percentage of new teachers who received initial teacher education				
	20% of new teachers	7%	7%	N/A

Development of a framework for teachers' continuous professional development				
Teacher ranking system with associated training credits	100% Framewok developed	N/A	80%	N/A (work had not starated yet)
Modernize the basic and secondary curriculum				
All textbooks reviewed and aligned with knowledge economy skills and used	Roll out all new curricula and train teachers by 2021 Introduce the new curriculum in phases (e.g. roll out curricula for grades 1, 5, and 9 in phase 1; grades KG1, 2, 6, and 10 in phase 2; grades KG2, 3, 7, and 11 in phase 3; and grades 4, 8, and 12 in phase 4)	N/A	N/A (Since the MOE's role in curriculum development is one of support, the ESP indicator for this reform area is setting up coordination mechanisms with the NCCD by 2018)	N/A

This table includes the main areas that were frequently cited in the key informant interviews, and these areas have been among the key priorities for all three delivery units and donors alike. Teachers' professional development and curriculum reform were among the top priorities for both the R&E Unit and the PMDU. As illustrated in Table 6, delays in achieving the targets did occur with some areas, especially where streamlining accountability was difficult and/or donor funding was involved, as the next section explores.

Section 5: Multiple accountabilities in practice: Jordan's education reform between 2010 and 2019

This section examines specific examples of reform that have been repeatedly mentioned across the key improvement indicators (KIIs). These examples illustrate how and when the delivery units in the education reform landscape were conducive to effective implementation or counterproductive to it. Among the reform areas that were highlighted earlier as particularly oversaturated with stakeholders, two were exceptionally popular and controversial: teacher policy reform and curriculum reform.

The next two subsections provide further discussion on the confounding effect of introducing a delivery unit as an additional layer of monitoring and reporting for bureaucrats. The examples described highlight when delivery units were successful in enhancing policy implementation and when they were not. Some of the examples show that a delivery unit was able to successfully resolve high-level implementation challenges when it came to outputs-focused reform goals. The success factor in these cases was the delivery unit's proximity to the center of government and its

[13] Internal departmental action plan provided to the author by the head of the teacher policies department.

leverage of political capital to unblock budgetary and legal barriers. Other examples discussed in this section also highlight where a delivery unit was not able to leverage its function to resolve more quality-focused implementation tasks due to the complexity and political sensitivity of the content of reform. This entailed conflicting visions for the development and execution of a particular policy or program, as well as lack of clarity around who the ultimate authority should be regarding technical input. The third subsection presents two mini-examples of reform areas that benefited from multiple accountabilities. These examples show the role of the delivery unit in sustaining political commitment in a context of high turnover in senior leadership at the ministry.

Table 6 below shows the different policy areas that are described in this section as examples of reform that underwent the challenge of navigating multiple accountabilities. The intended and actual targets achieved are presented to highlight examples of delays and other examples of timely implementation. This section also describes the role of a delivery unit in either successfully achieving the preset targets or failing in the endeavor.

Table 6: Target Achievement amid Multiple Accountabilities

KPIs	Description of KPIs, implementation results, and stakeholders involved			
Establish an Initial Teacher Education Program	Policy Area	Teacher Policy		
	Target Set	Launch by 2016		
	Actual Target Achieved	Launched in 2016		
	Technical Assistance	UCL QRTA	Funding	Government of Jordan
	Follow Up	R&E Unit DCU		
General and subject-specific teaching standards	Policy Area	Teacher Policy		
	Target Set	Adopt general teaching standards by 2016	Develop National Teacher Professional Standards (NPTS) at the subject level by 2016	Teaching standards were adopted in 2019.
			Develop National Teacher Professional Standards (NPTS) at the subject level by 2016	
	Actual Target Achieved	General teaching standards adopted in 2018	Work on the NPTS at the subject level started in 2017/18	Subject-specific teaching standards were adopted in 2019
	Technical Assistance	DCU R&E Unit UNESCO QRAE QRF UNICEF	Funding	GAC FCDO UNICEF
	Follow Up	DCU R&E Unit		

KPIs	Description of KPIs, implementation results, and stakeholders involved			
Teacher CPD for teachers' continuous professional development	Policy Area	Teacher Policy		
	Target Set	Develop framework by 2019		
	Actual Target Achieved	No framework developed by 2019		
	Technical Assistance	In chronological order UNESCO Consultants from the World Bank	Funding	World Bank
	Follow Up	DCU R&E Unit		
Establish an independent center for curriculum development	Policy Area	Curriculum Reform		
	Target Set	Establish by 2017		
	Actual Target Achieved	Established by 2017		
	Technical Assistance	N/A	Funding	Government of Jordan
	Follow Up	R&E Unit PMDU		
Revise curricula and train teachers	Policy Area	Curriculum Reform		
	Target Set	ErfKE II: revise all curricula and textbooks by 2016		
	Actual Target Achieved	Curricula and textbooks revised by 2016/7	Rollout of math and science curriculum for 1st and 4th grade in 2019.	
	Technical Assistance	In chronological order World Bank MOE NCCD	Funding	Government of Jordan
	Follow Up	R&E Unit PMDU		
Improve results for Trends in International Mathematics and Science Study (TIMSS) and Programme for International Student Assessment (PISA)	Policy Area	Quality (intersecting across teacher policy and curriculum reform)		
	Target Set	TIMSS (2019) Science 489 Math 446	PISA (2018) Science 439 Math 416 Reading 429	
	Actual Target Achieved	TIMSS (2019) Science 489 Math 446	PISA (2018) Science 439 Math 416 Reading 429	

Sources: NCHRD, 2016; World Bank, 2016; MOE, 2018; OECD, 2018

5.1 Multiple accountabilities in teacher policy reform

Teacher policy reform was frequently cited in the interviews as an area that faced various implementation challenges due to the high concentration of stakeholders and diverging visions for initial teacher training and continuous (re)qualification. The introduction of a delivery unit in this particular reform area was able to crowd out competing visions for initial teacher training reform in some instances. However, in other instances, the delivery unit confronted implementation challenges due to push back from civil society—against which a delivery unit had little defense in Jordan. This subsection describes how multiple accountabilities in teacher policy reform led to duplicate spending and technical assistance on certain projects. It also presents examples of how a delivery unit was able to successfully achieve its intended goals when it streamlined accountability for the results.

Investment in teacher policy reform came from various sources, including donor agencies, local NGOs such as the Queen Rania Foundation (QRF) and Queen

Rania Teacher Academy (QRTA), as well as INGOs such as UNICEF (see Table 6). Introducing a delivery unit within the RHC to expedite and improve the design and implementation of teacher policies led to certain successes and challenges. The R&E Unit's proximity to the center of government, as well as its leverage of political signaling to communicate a strategic vision and direction helped advance the sector's progress in key priority areas related to boosting teacher preparedness in the public sector—namely, pre-service teacher training. The R&E Unit's involvement ensured that the targets related to the establishment of the pre-service teacher training program were achieved within the anticipated timeframe, as shown in Table 6 above. However, in other activities related to designing and implementing teacher policies, such as teacher licensing and evaluation, the introduction of additional stakeholders where other donors and NGOs were already involved created conflict in technical advice, as well as duplication in funding and reform efforts. This was the case with the development of teaching standards. Finally, the delivery unit's particular institutional host affected its influence on policy implementation. For example, the positioning of the R&E Unit in the RHC limited its impact on the implementation of some reforms such as the adoption and execution of the teacher licensing policy, which was scrutinized by the teachers' union and general public—both of which held the MOE accountable for the outcomes of such a policy and its impact on the welfare of public sector teachers.

5.1.1 Scrambling for a say: Delivery units in resolving—and sometimes complicating—conflicting visions for implementation in Jordan

Policies for the professional development of teachers have been a priority for the MOE since 2003 (World Bank, 2003, 2009, 2017; NCHRD, 2016; MOE, 2018). Recognized as the driving forces in the learning process at school, teachers have been at the forefront of education reform over the last two decades. Reforms under ErfKE I focused on in-service teacher training, through one-off trainings or workshops, and improving the quality of induction training for newly hired teachers (World Bank, 2009; MOE DCU, 2012). Under ErfKE II, the MOE narrowed its efforts to focus on improving the quality of teaching by setting standards for effective teaching and learning. The MOE also wanted to revise teacher evaluation policies to ensure the application of those standards to teacher evaluation, (re)licensing, and career progression (World Bank, 2016). The National Teacher Professional Standards (NPTS) were developed between 2010 and 2015 and were under review until their official adoption in 2018. The original target year for finalizing the standards was 2016 (World Bank, 2017). The delays in adopting the NPTS had a ripple effect

on other teacher policy-related projects, including the development of the teachers' continuous professional development (CPD) framework, the teacher evaluation framework and tools, and the in-service training certification and accreditation framework (MOE, ETC implementation workplan, n.d.).

This area of reform was particularly saturated with various stakeholders. UNESCO, QRF, UNICEF, and the Queen Rania Award for Excellence (QRAE) all provided technical assistance to the MOE to develop general and subject-specific teaching standards, with funding from GAC, DFID (now FCDO), QRF, and the World Bank (MOE, ETC implementation workplan, n.d.). The work on the subject-specific teaching standards was launched before the World Bank's mission to Jordan took place, and there was a gap between the end of ErfKE II and the beginning of the Jordan Education Reform Support Program (JERSP). To fill this gap, the MOE partnered with QRF to recruit international and local expertise to co-develop subject-specific teaching standards with the MOE (Hafs Mallouh, August 2019; MOE, ETC implementation workplan, n.d.).

While the implementation gap existed, it was not for lack of interest or intention. Budget cycles across institutions did not necessarily align, and by the time the World Bank's funding plans were shared with the ministry, the QRF had already been recruited to support the development of the subject-specific teaching standards (Hafs Mallouh, August 2019; MOE, ETC implementation workplan, n.d.). Furthermore, this reform was part of the HRD strategy, and so, as an HRD KPI and a donor-funded project under the JERSP, the R&E Unit and DCU both monitored the progress of the efforts to develop the standards. Given the intersection between the subject-specific teaching standards and the general teaching standards (NPTS), the involvement of the QRF in providing technical assistance led to further review of the MOE's previous work on the general teaching standards, and, consequently, further delays in their adoption in 2018. Conflicting assessments of the quality of the NPTS created conflict between oversight bodies as well. While the QRF's link to the RHC gave weight to its technical advice to the MOE, the fact that the adoption and publication of the NPTS was a disbursement-linked indicator (DLI) for 2016 created friction between the MOE and the donors (Hafs Mallouh interview, July 2019; NGO02, July 2019). The adoption of the NPTS was also a pre-requisite to disbursing funds for dependent projects, such as the teacher continuous professional development and evaluation frameworks. Tensions arose about the direction of the subject-specific teaching standards and the authorizing environment around who made the final decision regarding the quality of the NPTS and its readiness for official

adoption. Additionally, the multiplicity of actors and funders in this area led to waste in resource management, as funds were spent on duplicate efforts by multiple organizations who worked on the NPTS (Hafs Mallouh, July 2019; DC02, July 2019).

5.1.2 Bounded legitimacy: The delivery unit and Jordanian civil society

The authorizing environment of a delivery unit in Jordan was not consistent across the reform areas. In the cases where it was weak, the delivery unit in question was not able to intervene to resolve the implementation bottlenecks. The teacher licensing policy was one of the examples cited in the KIIs that illustrates the complexity of multiple accountabilities in service delivery where the political legitimacy of the unit in a given policy area determined the relative effectiveness of its function, compared to other units or structures monitoring implementation. The teacher licensing system was intended to apply to new teachers in 2020; however, at the time of this study, the entire project had been put on hold (Hafs Mallouh, June 2020; RC01, July 2019). The delay at the time could be attributed to several political economy factors, including the involvement of the teachers' union in ensuring the policy's uptake. The accountability for teacher licensing extended beyond the purview of any single delivery unit or public institution.

The involvement of politicized civil society organizations in the reform process made the role of delivery units even more challenging to navigate, especially with the R&E Unit housed within the Royal Court which was supposed to be taking a backseat in policymaking. The teachers' union was heavily involved in the negotiation of the terms and stipulations of the licensing requirements and was consulted by the MOE and the PMO. The union also spearheaded public scrutiny of—and eventually opposition to—the teacher licensing policy (Hafs Mallouh, July 2019 and June 2020; Dr. Omar Al-Razzaz, July 2019). While the PMO continued its negotiations with the teachers' union well beyond the target year for the bylaw's adoption, the R&E Unit's association with the RHC made any interaction between the unit and the teachers' union politically impossible, limiting the space it had to maneuver to problem-solve. In September 2019, the teachers' union mobilized public school teachers and led a nationwide teacher strike that lasted four weeks—a quarter of a school term for students (Aljazeera, 2019). The teacher licensing bylaw, which was meant to apply to at least 20 percent of new teachers in 2020 (see Table 5), had still not been approved and adopted in 2019. Moreover, all reform efforts on teacher-related policies, such as the adoption and communication of national teaching standards and the development of the CPD framework, were paused due to the sensitive

political climate around teacher compensation and professional development at the time. The teacher strikes led to further delays in achieving the key performance indicators related to teacher policy reform. The delivery units, whether at the PMO, Royal Court, or MoE, had little space to navigate such complex political dynamics within the country's education landscape.

5.1.3 All in the connections: A strong delivery unit is one with close ties to both the political sponsor and the implementing bureaucrats

A delivery unit in Jordan was successful in streamlining accountability when its political capital was coupled with strong relations with bureaucrats. Despite the challenges faced in implementing teacher policies, the R&E Unit was able to streamline accountability for specific projects that had political backing from both the RHC and the minister. Coupled with close collaboration with ministry bureaucrats, the R&E Unit was able to leverage its access to central government finances and political institutions to achieve its targets in certain areas. One such area was pre-service teacher training. Initial Teacher Education (ITE) had been an area of interest for donors since ERfKE I in 2003 (World Bank, 2003). The head of the Teachers' Policy Department at the time of the interviews stated that the ministry had "benefited [from the R&E Unit] when it came to implementation" since "after planning the supervisor comes and says 'we don't have [the] budget' or 'we have other priorities.' The workload in a developing country like ours has many priorities and not a lot of resources to achieve them, which kind of diverts her [the country] from her plans from a daily work perspective" (Hafs Mallouh, July 2019).

One particular policy area with much promise for improving learning outcomes had attracted a lot of financial, programmatic, and institutional attention. USAID and other donors had mobilized around available funds to build capacity among universities to improve their Bachelor of Education (B.Ed.) programs. The only majors offered had included: Early Childhood Education and Development (ECED); classroom teaching (grades 1 to 3); and special education (MoHE, n.d.). USAID had funds to invest in university B.Ed. programs to enhance the quality and range of offerings to more effectively train the prospective teachers entering the recruitment pipeline in the public sector (DC03, July 2021; MOE DCU, 2014; Hafs Mallouh, July 2019). USAID's proposed model intended to build sustainable capacity across universities, utilizing existing structures instead of creating new institutions.

While views were split on the vision for how to improve pre-service teacher training,

all agreed that it needed financial and operational attention. The QRTA and QRF, with links to the RHC, had been proponents of establishing a new center for initial teacher education (ITE), developing a high-quality curriculum that would attract students through a competitive application process, making funding conditional based on their commitment to working in public sector schools for a minimum of three years after graduating from the program (MOE, DCU, 2014; RC01, July 21, 2019). After developing a position paper summarizing the evidence on ITE and proposing the new model for pre-service training independent of existing B.Ed. programs, QRTA organized a stakeholder consultation session in 2015 to solicit input into the proposed model for pre-service teacher education, namely a teacher college (MOE, DCU, 2014). The DCU was managing two different visions across three major stakeholders at the time. Political sponsorship of QRTA's idea by the RHC, in addition to QRTA's close relationship with MOE middle management and historical record of providing high quality in-service teacher training, ensured that the envisioned teacher's college received government funding and buy-in from the Minister of Education.

The 2016 establishment of the teacher college—named the Teacher Education Professional Diploma (TEPD)— was made possible by its adoption as a priority by the RHC and the MOE, which unlocked financial and capital resources within the center of government and secured high-level partnerships with renowned educational institutions such as the Institute of Education (IoE) at the University College of London (UCL) (UCL, 2020; NGO01, August 2019). Sustained monitoring and commitment to the TEPD program was taken up by the R&E Unit once it was formalized in 2016. The R&E Unit's oversight of the continued successful launch and scaling up of the TEPD program to offer wider program selection guaranteed that targets were achieved within the time frame outlined in the HRD strategy (see Table 5). To sum up the R&E Unit's role in this aspect of policy implementation, the head of teacher policy development emphasized that "the R&E Unit at the Royal Court helped us, the smaller leaders or employees [at the ministry] to re-orient towards [high-level] decisions" (Hafs Mallouh, July 2019). The R&E Unit ensured that complementary efforts were coordinated across the sector, and partners such as the Ministry of Finance and the Ministry of Planning and International Cooperation (MOPIC) were committed to the implementation of such key sectoral priorities.

5.2 Multiple accountabilities in curriculum reform

Introducing a delivery unit at the RHC helped advance the implementation of the HRD's curriculum reform activities in some respects, such as securing funds and

legislative backing. However, the delivery unit's position within the Royal Court also created challenges that led to task stalling and ultimate delays in the rollout of the new textbooks and associated teacher training workshops and guides. The short-term output-based goals of curriculum reform, such as establishing an independent center for curriculum development and recruiting world-renowned publishing firms to bid for technical assistance, were achieved effectively given the R&E Unit's ability to resolve budgetary and legal bottlenecks within the central government (RC01, July 2019; NGO02, July 2019; Dr. Ruba Batayneh, August 2019). However, medium- and long-term goals—such as identifying learning outcomes and frameworks for all grades and subjects, as well as producing high-quality textbooks, teacher guides and teacher training workshops—faced significant delays compared to the targeted timelines presented in Table 6. The latter goals required collaboration from the MOE to successfully achieve, making the R&E Unit's role much more difficult and politically sensitive, since its engagement with and oversight of civil servants was limited. The DCU and the minister held more clout in soliciting greater responsiveness from departmental staff within the ministry (RC01, July 2019; NGO02, July 2019). Moreover, the content of the new textbooks received extensive scrutiny from the media, posing various challenges to the curriculum's release and, ultimately, uptake by the ministry.

5.2.1 Reforming the Jordanian curriculum was on everyone's agenda

Curriculum reform has been a perpetual priority for the education sector since 2003. Under ErfKE I and II, the goal of both the MOE and the donor community was to ensure that the curriculum was revised to incorporate skills essential for a "knowledge-based economy" (MOE DCU, 2012, 2014; World Bank, 2017). A national assessment was developed to assess the impact of the revised curriculum on learning outcomes. The National Assessment for the Knowledge Economy (NafKE) results showed meager gains in learning in science, math, and reading—less than a school term worth of learning (NCHRD, 2014). Based on these results in 2014, the MOE revised all curricula to align the learning outcomes and content with "knowledge economy skills," and this revision was finalized in 2016 (MOE DCU, 2014; World Bank, 2017). In 2016, the HRD strategy identified curriculum reform as the main priority and proposed that a semi-autonomous body be established to coordinate and manage the development of the modernized curriculum (NCHRD, 2016). Previously a function within the MOE, curriculum development was mandated

[14] "استفدنا من الوحدة في الديوان بالتنفيذ بعد التخطيط بيجي المسؤول بيحكيلنا ما في موازنة... في عنّا أولوية أخرى، في عنده العامل الضغط اليومي. في دولة نامية زي هيك عندها أولويات كتيرة وما في عندها الموارد لتحققها...شوي بيحرفها عن خططها على نحو العمل اليومي."

to fall within the purview of the National Centre for Curriculum Development (NCCD), which was institutionalized through legislation passed by Parliament. As the establishment of the NCCD was one of the HRD national priorities, the R&E Unit played a significant role in ensuring its successful setup in April 2017 (RC01, July 2019; NGO01, July 2019; NGO02, July 2019; Dr. Ruba Batayneh interview, August 2019). However, the establishment of the NCCD and the efforts to revise the curriculum were not without political tension. Extracting this function from the MOE did little to incentivize support from MOE staff to aid in the reform process. Interviews with stakeholders involved in supporting the NCCD highlighted that the decision to shift the role of developing the curriculum to an external institution was made at higher levels (NGO01, July 2019; NGO02, July 2019). These types of decisions—across policy areas, not just curriculum reform—were not always looked upon favorably by civil servants. An interview with a civil servant from the DCU stated that "often, when trying to resolve capacity issues with the MOE, the resolution is to extract that function from the technical department [within the ministry] and set up a new institution to replace [the technical department] and this leads to conflict in tasks/mandate and conflict in decisions," which the interviewee described as a source of "complication or conflict" (Dr. Khawla Hattab, DCU, MOE, 2019).

Multiple accountabilities in curriculum reform went beyond the reality of having multiple delivery units; multiple public agencies had mandates to reform the national curriculum. In addition to conflicts in mandates and decision-making authorities, the MOE staff reported that such proliferation of public agencies with the same functions as the MOE led to duplication of reform efforts. For example, during the inception of the NCCD, the MOE was still in the process of revising its curriculum under ErfKE II, with funding from the World Bank (World Bank, 2017). Curriculum review cycles in other parts of the world with high-performing education systems occur every 6 to 10 years, with midterm reviews, in contrast to Jordan where it took a 1-2-year gap for such renewed efforts after the close of ErfKE II (Gouëdard et al., OECD, 2020). While the R&E Unit was able to achieve its target of ensuring the setup of the NCCD on time by streamlining accountability and securing necessary financial and legal resources for implementation, it was not able to resolve competing interests—across both MOE staff and the general public—in shaping the content of the curriculum reform.

5.2.2 It was a sensitive topic: The delivery unit and the frontlines

Despite being able to secure both funds and legislative support for the NCCD, the R&E Unit confronted some challenges around advancing the workplan and timeline

of the NCCD. However, its influence over civil servant behavior at the MOE was less effective—and extended beyond its bureaucratic and political purview. In trying to get the curriculum developed and translated into teacher guides and training materials, the NCCD struggled to recruit experts from within the MOE and its field directorates to provide technical and operational input into the new curriculum (RC01, July 2019; NGO01, July 2019; NGO02, July 2019; Dr. Ruba Batayneh interview, August 2019). The former director of the NCCD [15] stated that the delays in rolling out the content occurred because of the MOE's responsiveness—or lack thereof—to the NCCD's invitations to support the content development efforts. Having been sidelined from most of the high-level decision-making process related to curriculum reform, the MOE's reported reticence in providing technical assistance could be attributed to lack of clarity around who should be involved and at what points in time. This lack of clarity was exacerbated by the frequent changes in ministers and, therefore, fluctuation in high-level direction to ministry bureaucrats

The R&E Unit intervened to resolve tensions between MOE subject supervisors and the NCCD's technical team by escalating the issue to the minister; however, the R&E Unit's interaction with civil servants within the ministry was limited due to the sensitivity of its institutional affiliation. The direct link to the minister could have been effective in orienting bureaucrats toward a common goal of rolling out the new curriculum on time; however, the high turnover made that feat more challenging. Consequently, the R&E Unit had little control over the process and timeline of revising and releasing new textbooks as planned and according to the timeline set forth in the HRD strategy (see Table 6).

Furthermore, the MOE's coordination and collaboration with the NCCD was not seamless, according to the now former director of the NCCD, Dr. Ruba Batayneh (August 2019). The ESP indicated that a coordination mechanism between the MOE and the NCCD was to be set up by 2018, but it had yet to be successfully achieved in 2019 (MOE, 2018). Furthermore, draft curriculum materials had been leaked to the press on a number of occasions, exposing the NCCD to critical scrutiny and public criticism of the way in which the function of curriculum development was extracted from the MOE (Dr. Ruba Batayneh, August 2020; NGO02, July 2019). Furthermore, the NCCD's partnership with HarperCollins Publishers to develop the curricula was heavily criticized in the media; there was a Twitter and media confrontation with the NCCD, with critics tweeting hashtags such as "no to Collins' Curriculum" and "no to reforming the curriculum" (The New Khalij, 2019). This level of public accountability

[15] During the time of the interview, Dr. Ruba Batayneh was the acting director of the NCCD.

and scrutiny led to high turnover in the leadership of the NCCD, which caused further delays. Instead of the original rollout of all new textbooks by 2021 (see Table 5) across three phases, starting with grades 1, 5, and 9 in the first phase, only the math and science curricula for grades 1 and 4 were reformed and ready to roll out by 2019 (NCHRD, 2016; Al Nawa, 2019). Again, as with the teacher licensing policy reform, theinstitutional affiliation of the delivery unit limited its ability to resolve implementation challenges related to political opposition, whether from the general public or the civil servants working in education. The R&E Unit's affiliation with the RHC made its role riskier given the political landscape of curriculum reform.

5.3 Multiple accountabilities could sometimes sustain commitment to reform priorities

Despite the complications that multiple stakeholders and accountability lines added to the implementation of the reform projects, under some circumstances, this multiplicity of players at times also aided implementation rather than hindering it. Under some political conditions, such as high turnover in senior ministry leadership, the coordination and convergence among donors around key priorities helped sustain the commitment to the implementation of prominent programs. This was especially the case for programs that had proven effective in improving learning outcomes for students.

The Reading and Mathematics Program (RAMP) and the School and Directorate Development Program (SDDP) were among those reform projects that were consistently prioritized by the DCU due to the strong and coordinated advocacy that multiple donors and civil service managers in education dedicated to them. RAMP, initially a USAID-funded project, attracted further investment from the FCDO due to its proof of impact on student learning. The program involved training teachers on evidence-based assessment and teaching strategies for students in grades one to three, as well as training MOE supervisors to effectively monitor and coach teachers to ensure their continuous professional development and adherence to the prescribed teaching strategies (Brombacher et al., 2012). After its pilot in 2012, which showed an increase in literacy and numeracy among children in grades one to two, USAID continued to subcontract Research Triangle Institute (RTI), a U.S.-based entity, to support the MOE in scaling the program to all early-grade school classrooms and 14,000 teachers, building sustainable capacity among field directorate supervisors to monitor and regularly coach teachers in their pedagogical practices (Aarnout Brombacher interview, July 31, 2019; Brombacher et al., 2012; USAID, 2018). Despite frequent changes in ministers and reform priorities in the

sector, RAMP remained a stable pillar in the MOE's teaching and learning quality improvement efforts.

As with the RAMP initiative, insights from a third-party evaluation of the SDDP showed promise for impact to donors and ministry officials alike (unpublished evaluation commissioned by GAC). The evaluation found that the SDDP showed great promise in terms of impact on school leadership and school development. This inspired a convergence on implementation priorities under this reform area, which was further reinforced by the advocacy of the DCU with each of the incoming ministers. The SDDP was initially launched under ErfKE II as part of the MOE's efforts to decentralize the management of school improvement processes and decision-making. The SDDP was co-funded by GAC and USAID. The program involved providing schools with grants and training (for school leadership) on how to develop and implement school development plans tailored to the specific learning and teaching needs of a given school. The implementation was, overall, effective in supporting school principals as they developed realistic plans and implemented them (MoE, DCU, 2014; DC02, July 2019). A coalition of support—and alignment in the vision for implementation—among donors and education bureaucrats ensured that these two reform projects maintained consistent buy-in from the minister, were institutionalized within the MOE's operations and trainings for field directorate staff, and the policies and guidelines cascaded down to the school level (MOE DCU, 2014; MOE, 2018; DC02, July 2019; Hind Hindawi, July 2019).

The examples of RAMP and the SDDP suggest that the issue of multiple accountabilities and the consequences they have on policy implementation are far from simple. In many cases in Jordan, multiple accountabilities derailed implementation or induced unwanted inefficiencies in spending and technical assistance. However, in some cases multiple accountabilities inspired a coalition for sustained commitment to previous priorities, especially when the impact on student learning and school leadership was established. This outcome is especially significant in a landscape with constant flux in ministerial and central government leadership. Critical conditions to enable such a coalition included converging on a vision for implementation and buy-in regarding the anticipated impact of the reform. The coalition itself acted as a facilitator of accountability, not necessarily canceling out multiple accountability relationships but streamlining instructions and implementation efforts such that a comparable effect to streamlining accountability was achieved. It is also important to note the role that school-level evidence and institutionalization of the delivery approach throughout the education bureaucracy—cascading down to the school level—played in sustaining the political commitment to these reform plans.

[16] In 2021, the NCCD started working on new math and science curricula for grades 9 and 12, which were also rolled out.

Section 6: Discussion

This paper provides a historical narrative of the development and evolution of delivery units in Jordan's education sector, describing the motivations behind introducing each one and some of the design choices that policymakers made to ensure that a given unit functioned effectively and achieved its intended goals. This historical account provides context for understanding how and why multiple delivery units coexisted in Jordan's education sector between 2010 and 2019, explaining some of the political economy features that either impeded or aided in the functioning of the delivery units.

The case study addresses two main questions that existing academic and policy literature have not yet explored at length. First, the paper answers the question of how the introduction of a delivery unit—or multiple units— might affect the dynamic of public service delivery and accountability for results. The qualitative evidence from the developments within Jordan's public education sector between 2010 and 2019 provides insight on each of these questions, highlighting key findings that could both inform policymakers' decisions about resolving accountability problems in their relevant ministries as well as motivate further research into the topic of delivery units and multiple accountabilities in policy implementation.

In a landscape populated with pre-existing political, hierarchical, and legal accountability relationships, the introduction of a delivery unit further complicated the dynamics of education service delivery in Jordan between 2010 and 2019. The adoption of a delivery unit did not necessarily override other arrangements within the bureaucracy or across the sector in mandating roles and responsibility for results. Furthermore, the position where the delivery unit resided was important; in the case of Jordan, proximity to the center of government and stability of the RHC enabled the R&E Unit to effectively resolve financial and legal bottlenecks at higher levels of political and bureaucratic leadership. However, the R&E Unit's association with the monarchy also made its interference with bureaucratic processes and some politicized reforms—such as the teacher licensing policy and curriculum reform—potentially risky to the stability of domestic politics.

The DCU's structural integration with the MOE was conducive to its function of coordinating and monitoring departmental progress in policy reform. Its direct line to the minister and its connection to external stakeholders empowered it with both the information and authorizing environment to piece together various sources of funding and technical assistance in a cohesive manner to support improved learning

in the sector. The DCU also had the perceived institutional legitimacy among bureaucrats to monitor and advise on policy design and implementation. Moreover, its relational and physical proximity to education bureaucrats made it a good candidate for problem-solving when implementation challenges arose.

Where the R&E Unit was not necessarily effective or authorized to intervene, the DCU could have effectively intervened to ensure the desired results were achieved. However, the DCU was inconsistent in attracting the right caliber of staff that would bolster its delivery function (Dr. Khawla Hattab, DCU, MOE, July 2019; Hind Hindawi, DCU, July 2019; DC02, 2019). The DCU therefore faced challenges in streamlining accountability for results and successfully coordinating with counterparts at the RHC and PMO. On the other hand, the DCU's setup within a relevant ministry meant that it could not leverage political signaling or sponsorship in the same way that both the R&E Unit and the PMDU could—which gave the latter two a comparative advantage. Nevertheless, the DCU's proximity to mid-level managers at the MOE gave it the power to dictate information flows upstream and instructions downstream, thereby deciding when and how to include different stakeholders in the policy dialogues. Finally, donors' legal and financial conditionalities around specific KPIs created additional monitoring and evaluation requirements that bureaucrats needed to address. The introduction of delivery units in the RHC and PMO also introduced an additional monitoring layer to bureaucrats' already overloaded schedules.

Adding another principal to whom bureaucrats needed to report and align their goals created a space for conflicting instructions, ambiguity in roles and responsibilities, inefficient information-sharing practices across stakeholders, and competition among priorities that bureaucrats needed to navigate. Under such conditions, some projects were delayed, duplicated or mismanaged such that funds were not effectively spent to produce high-quality outputs and outcomes, as was the case with teacher policy and curriculum reform. However, in some cases, having multiple accountabilities ensured that consolidated advocacy maintained the ministerial commitment to key priority areas from preceding administrations, despite changes in government, such as the commitment to early-grade programs and school decentralization. In cases where a delivery unit was able to manage or replace competing accountability relationships, it was able to resolve competing goals across stakeholders by streamlining decision-making and leveraging political sponsorship to select a single vision for reform-as was the case with the development and launch of the initial teacher education program.

The significant role of donors in education reform in developing countries is not

unique to Jordan; it is a common trend across many developing countries. Through their funding programs and technical assistance, donors do not merely set legal forms of accountability; they also influence the implementation process through their provision of technical expertise.

The introduction of a delivery unit in a multi-stakeholder context such as Jordan's can potentially compound a multiple accountabilities problem. In some cases, the delivery unit can also successfully manage these competing accountability relationships, as illustrated in this paper through the qualitative empirical cases. However, these successes occurred when addressing implementation challenges pertaining to budgetary or legislative bottlenecks and high-level approvals for project plans under high rates of ministerial turnover. More content and quality-focused implementation challenges, such as harmonizing technical advice or ensuring public approval and policy uptake, were harder for delivery units to navigate.

Section 7: Conclusion

This retrospective case study highlights some of the key political economy and contextual features that policymakers should take into consideration when choosing to adopt and design a delivery unit in their given context. The findings highlight the confrontation that a delivery unit in Jordan experienced with pre-existing structures and procedures that continued to exercise other types or channels of accountability with bureaucrats, even with the adoption of a new delivery unit. Given the potential for increased use of delivery units in public sector reform, policymakers need to assess the potential trade-offs of introducing a delivery unit to enhance implementation and consider the other functions aside from accountability that they might leverage to motivate better performance among bureaucrats. This case study calls into question the merits of leveraging a delivery unit for management functions beyond accountability. When asked about the comparative advantage of such units, the former Minister of Education and former Prime Minister of Jordan Dr. Omar Al-Razzaz stated in his interview in July 2019 for this study, "when we use these units to help us focus [on priorities] and problem-solve and support our decisions, it works beautifully. However, the accountability can only reside with the minister involved. That always needs to be clear." He indicated that perhaps accountability vis-à-vis a delivery unit is not only difficult to operationalize but also not required for its role in enhancing policy implementation.

Policymakers looking to establish a new delivery unit for their sector or organization should assess the trade-offs of introducing another accountability mechanism for policy implementation. Furthermore, future research could look more closely at how

multiple accountabilities under a delivery unit could shape bureaucratic behaviors, attitudes, and knowledge further along the delivery chain, down to the school level. Future research could explore this dynamic of multiple accountabilities in other countries with delivery units to understand more comprehensively whether this dynamic was unique to Jordan during the time frame studied or whether it is commonly found across ecosystems with multiple political executives and stakeholders.

References

Adelman, M. & Lemos, R. (2020). Managing for Learning: Measuring and Strengthening Education Management in Latin America and the Caribbean. Washington, DC: World Bank doi:10.1596/978-1-4648-1463-1. License: Creative Commons Attribution CC BY 3.0 IGO

Allesandro, M., Lafuente, M., & Santiso, C. (2014). The role of the center of government: A literature review. Inter-American Development Bank. https://www.researchgate.net/publication/263461524_The_Role_of_the_Center_of_Government_A_Literature_Review_Washington_DC_Inter-American_Development_Bank_Institutions_for_Development

Andrews, M., Pritchett, L., & Woolcock, M. (2017). Building state capability: Evidence, analysis, action. Oxford University Press.

Andersen, S. C., & Moynihan, D. P. (2016). Bureaucratic investments in expertise: Evidence from a randomized controlled field trial. Journal of Politics, 78(4),1032–1044.

Bandiera, O, Barankay, I., & Rasul, I. (2007). Incentives for managers and inequality among workers: Evidence from a firm-level experiment. The Quarterly Journal of Economics, 122(2), 729–773. https://doi.org/10.1162/qjec.122.2.729

Barber, M., Motfit, A., & Kihn, P. (2010). Deliverology 101: A field guide for educational leaders. Sage Ltd.

Barber, M., Kihn, P., & Motfit, A. (2011, February). Deliverology: From idea to implementation. Our Insights. McKinsey & Co. https://www.mckinsey.com/industries/public-and-social-sector/our-insights/deliverology-from-idea-to-implementation

Barber, M. (2013). The origins and practice of delivery. Voices on Society: The Art and Science of Delivery. McKinsey & Co.

Barber, M. (2015). How to run a government: So that citizens benefit and taxpayers don't go crazy. Penguins.

Bevan, G., & Hood, C. (2006). What's measured is what matters: Targets and gaming the English health care system. Public Administration, 84(3), 517–538. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-9299.2006.00600.x

Booth, D. (2012). Development as a collective action problem: Addressing real challenges of African governance. Africa Power and Politics Programme.

Bovens, M. (2007). Public accountability. In E. Ferlie, E. L. E. Lynn, & C. Pollitt (Eds.), The Oxford handbook of public management (pp. 182–208). Oxford University Press.

Brandsma, G. J., & Schillemans, T. (2013). The Accountability Cube: Measuring Accountability. Journal of Public Administration Research and Theory, 23(4), 953–975. https://academic.oup.com/jpart/article/23/4/953/960691

Brinkerhoff, D. W. (2004). Accountability and health systems: Toward conceptual clarity and policy relevance. Health Policy and Planning, 19(6), 371–379.

Brombacher, A., Collins, P., Cummiskey, C., & Kochetkova, E. (2012). Student Performance in Reading and Mathematics, Pedagogic Practice, and School Management in Jordan. USAID. https://pdf.usaid.gov/pdf_docs/pa00jbnh.pdf

Buerkli, D. (2015). Welcome to MindLab-designer of delivery and innovation in Denmark. Centre for Public Impact. https://www.centreforpublicimpact.org/insights/welcome-to-mindlab

Carpenter, D. (2001). The forging of bureaucratic autonomy: Reputations, networks, and policy innovation in executive agencies, 1862–1928. Princeton University Press

Chambers, V., Wild, L., King, M., & Harris, D. (2012). Common constraints and incentive problems in service delivery. (Working Paper 351). Overseas Development Institute (ODI). https://cdn.odi.org/media/documents/7791.pdf

Chun, Y. H., & Rainey, H. G. (2005). Goal ambiguity and organizational performance in U.S. federal agencies. Journal of Public Administration Research and Theory, 15, 529–557.

Connolly, C. & Hyndman, N. (2017) The donor–beneficiary charity accountability paradox: a tale of two stakeholders. Public Money & Management, 37:3, 157-164, DOI: 10.1080/09540962.2017.1281629

Delivery Associates. (2018). Success delivered: How delivery units make a difference for governments and the citizens they serve. https://www.deliveryassociates.com/media/success-delivered

Duflo, E., Hanna, R., & Ryan, S. P. (2012). Incentives work: Getting teachers to come to school. American Economic Review, 102(4), 1241–1278.

Dubnick, M., & Romzek, B. (1998). Accountability. In J. M. Shafritz (Ed.), The International Encyclopedia of Public Policy and Administration (Vol. 1, pp. 6–11). Westview Press.

Education Commission. (2016). The Learning Generation: Investing in Education for a Changing World. https://report.educationcommission.org/wp-content/uploads/2016/09/Learning_Generation_Full_Report.pdf.

Estache, A., & Martimort, D. (1999). Politics, transaction costs, and the design of regulatory institutions. World Bank Working Paper 2073.

Freeguard, G., & Gold, J. (2015). Data-driven delivery: Lessons from the O'Malley administration of Maryland. Institute for Government. https://www.instituteforgovernment.org.uk/publications/data-driven-delivery-lessonso%E2%80%99malley-administration-maryland

Gailmard, S. (2009). Multiple principals and oversight of bureaucratic policy-making. Journal of Theoretical Politics, 21, 161–186.

Gailmard, S. (2012). Accountability and Principal–Agent Models. Oxford Handbook of Public Accountability. Oxford University Press.

Gaith, B. (December 21, 2022). 9th and 12th grade Science and Math textbooks to get updated. The Jordan Times. https://www.jordantimes.com/news/local/9th-12th-grades-get-updated-science-mathematics-textbooks%C2%A0

Gerrish, E. (2016). The impact of performance management on performance in public organizations: A meta-analysis. Public Administration Review, 76(1), 48–66.

Gold, J. (2014). International Delivery: Centres of government and the drive for better policy implementation. Institute for Government. https://www.instituteforgovernment.org.uk/publication/report/international-delivery-centres-government-and-drive-better-policy- implementation

Gold, J. (2017). Tracking delivery: Global trends and warning signs in delivery units. Institute for Government. https://www.instituteforgovernment.org.uk/publication/report/tracking-delivery

Gouëdard, P., Pont, B., & Huang, S. H. P. (2020). A Curriculum Reform: A Literature Review to Support Effective Implementation. Organisation for Economic Co-operation and Development (OECD). https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/WKP(2020)27&docLanguage=En

Gruening, G. (2001). Origin and theoretical basis of New Public Management. International Public Management Journal, (4)1, 1-25.

Harrison, T. (2016, July). The role of the centre in driving government priorities: The experience of delivery units (Working Paper). Oxford Policy Management. https://www.opml.co.uk/files/Publications/corporate-publications/working-papers/wp-role-centre-driving-government-priorities.pdf?noredirect=1

Hood, C., & Dixon, R. (2010). The political payoff from performance target systems: No-brainer or no-gainer? Journal of Public Administration Research and Theory, 20(2), i281–i298.

Khalil, F., Martimort, D., & Parigi, B. (2007). Monitoring a common agent: Implications for financial contracting. Journal of Economic Theory, 135, 35–67.

Klein, R., & Day, P. (1987). Accountabilities: Five public services. Tavistock.

Koppell, J. G. S. (2005). Pathologies of accountability: ICANN and the challenge of multiple accountabilities disorder. Public Administration Review, 65, 94–108.

Lafuente, M. & Gonzalez, S. (2018). Do delivery units deliver?: Assessing government innovations (Technical Note No. IDB-TN-1431). Inter-American Development Bank, Innovations in Citizen Services Division.

Lerner, J. S., & Tetlock, P. E. (1999). Accounting for the effects of accountability. Psychological Bulletin, 125(2), 255.

Mansoor, Z., Qarout, D., Anderson, K., Carano, C. Yecalo-Tecle, L., Dvorakova, V., & Williams, M. (2021). A Global Mapping of Delivery Approaches. DeliverEd Initiative Working Paper. Education Commission and Blavatnik School of Government. https://educationcommission.org/wp-content/uploads/2021/07/A-Global-Mapping-of-Delivery-Approaches_DeliverEd_July2021.pdf.

McCandless, H. E. (2001). A citizen's guide to public accountability: Changing the relationship between citizens and authorities. Trafford.

Ministry of Education (MoE), Jordan. (2018). Education strategic plan: 2018–2022. https://moe.gov.jo/sites/default/files/esp_english_final.pdf

Ministry of Education (MoE), Development Coordination Unit (DCU), Jordan. (2012) Annual Narrative Report.

Ministry of Education (MoE), Development Coordination Unit (DCU), Jordan. (2014) Annual Narrative Report.

Ministry of Education (MoE). (2022). Mid-Term Review Report of the Jordan Education Strategic Plan 2018–2022.

Ministry of Education (MoE). (n.d.). Implementation Workplan for Teacher Policy Reform. Unpublished internal memo.

Ministry of Education (MoE). (n.d.). DCU Coordination Structure. Unpublished.

Ministry of Higher Education (MoHE). (n.d.). Untitled list of universities and their majors. https://www.mohe.gov.jo/AR/List/%d8%a7%d9%84%d8%ac%d8%a7%d9%85%d8%b9%d8%a7%d8%aa___%d8%a7%d9%84%d8%a3%d8%b1%d8%af%d9%86%d9%8a%d8%a9_%d8%a7%d9%84%d8%b1%d8%b3%d9%85%d9%8a%d8%a9_

Moynihan, D. P. (2008). The dynamics of performance management: Constructing information and reform. Georgetown University Press.

Moynihan, D. P., Fernandez, S., Soonhee Kim, K. M., LeRoux, S. J., Piotrowski, B. E., & Wright, K. Y. (2008). Performance regimes amidst governance complexity. Journal of Public Administration Research and Theory, 21, i141–i15.5

National Committee for Human Resources Development (NCHRD). (2014). National Assessment for the Knowledge Economy.

National Committee for Human Resources Development (NCHRD). (2016). National strategy for human resource development 2016–2025. https://www.hrd.jo/nationalstrategy

Al Nawas, B. A. (August 8, 2019). New Curriculum Sees Integration of Critical Thinking. The Jordan Times. http://www.jordantimes.com/news/local/new-curriculum-sees-integration-critical-thinking

The New Khalij. (Nov 3, 2019). مناهج دراسية تثير جدلا في الأردن لمخالفتها الشرع وقيم المجتمع.
[School Curriculum Incites Controversy in Jordan for its Violation of Sharia and Community Values]. https://thenewkhalij.news/article/169748/

Organisation for Economic Co-operation and Development (OECD). (2018). Country Note: Jordan. https://www.oecd.org/pisa/publications/PISA2018_CN_JOR.pdf

Pollitt, C. (2003). The essential public manager. Open University Press/McGraw-Hill.

Prime Minister's Office. (n.d.). Organic Structure of the PMO. Downloaded from the website in 2019 before the structure was updated.

Rainey, H. G., & P.SteinbRaineyauer. (1999). Galloping elephants: Developing elements of a theory of effective government organizations. Journal of Public Administration Research and Theory, 9, 1–32.
Rasul, I., & D. Rogger. (2018). Management of bureaucrats and public service delivery: Evidence from the Nigerian Civil Service. Economic Journal, 128, 413–446.

Rasul, R., Rogger, D., & Williams, M. J. (2020). Management, organizational performance, and task clarity: Evidence from Ghana's Civil Service. Journal of Public Administration Research and Theory, 31(2) 259–277. https://doi.org/10.1093/jopart/muaa034

Rose-Ackerman, S. (1986). Reforming public bureaucracy through economic incentives? Journal of Law, Economics and Organization, 2, 131–161.

Schillemans, T., & Bovens, M. A. P. (2015). The challenge of multiple accountability: Does redundancy lead to overload? In M. J. Dubnick & H. G. Frederickson (Eds.), Accountable governance: Problems and promises (pp. 3–21). M. E. Sharpe.

Simon, W. (1983). Legality, bureaucracy, and class in the welfare system. Yale Law Journal, 92, 1198–1269.

Tarik, D. (October 16, 2019). الأردن… احتجاج شعبي على اعتماد مناهج دراسية بريطانية [Jordan…Civil Protest on the Adoption of British School Curricula]. Independent Arabia. https://www.independentarabia.com/node/64296/%D8%A7%D9%84%D8%A3%D8%AE%D8%A8%D8%A7%D8%B1/%D8%A7%D9%84%D8%B9%D8%A7%D9%84%D9%85-%D8%A7%D9%84%D8%B9%D8%B1%D8%A8%D9%8A/%D8%A7%D9%84%D8%A3%D8%B1%D8%AF%D9%86%E2%80%A6-%D8%A7%D8%AD%D8%AA%D8%AC%D8%A7%D8%AC-%D8%B4%D8%B9%D8%A8%D9%8A-%D8%B9%D9%84%D9%89-%D8%A7%D8%B9%D8%AA%D9%85%D8%A7%D8%AF-%D9%85%D9%86%D8%A7%D9%87%D8%AC-%D8%AF%D8%B1%D8%A7%D8%B3%D9%8A%D8%A9-%D8%A8%D8%B1%D9%8A%D8%B7%D8%A7%D9%86%D9%8A%D8%A9

Tweissi, A., Lebdih, K. & Ababneh, E. (2015). National Assessment for Knowledge Economy 2014 "NAfKE 2014".

van Thiel, S., & Verhof, D. (2012). Serving two masters: The plural principal problem in agency management. European Group for Public Administration (EGPA) Conference Paper.

Voorn, B., van Genugten, M., van Thiel, S. (2019). Multiple principals, multiple problems: Implications for effective governance and a research agenda for joint service delivery. Public Administration, 97, 671–685.

https://onlinelibrary.wiley.com/doi/10.1111/padm.12587

Williams, M., Leaver, C., Mundy, K., Mansoor, Z., Qarout D., Asim, M., Bell, S. & Billous, A. (2021). Delivery Approaches to Improving Policy Implementation: A Conceptual Framework. DeliverEd Initiative Working Paper. Education Commission and Blavatnik School of Government. https://www.bsg.ox.ac.uk/sites/default/files/2021-04/Delivery%20Approaches%20to%20Improving%20Policy%20Implementation.pdf.

Wilson, J. (1989). Bureaucracy: What government agencies do and why they do it. Basic Books.

World Bank. (2003). Project Appraisal Document on a Proposed Loan in the Amount of US$120 Million to the Hashemite Kingdom of Jordan for an Education Reform for Knowledge Economy I Program. https://documents1.worldbank.org/curated/en/239641468774926089/pdf/multi0page.pdf

World Bank. (2009). Project Information Document (Pid) Appraisal Stage Education Reform For Knowledge Economy I. https://documents1.worldbank.org/curated/en/748491468040540919/JO010ERfKE0II01aisal0Stage010Jan-28.doc

World Bank. (2017). Program Appraisal Document on a Proposed Loan in the Amount of US$200 Million (Including an IBRD Loan and Support from the Global Concessional Financing Facility) to the Hashemite Kingdom of Jordan for an Education Reform Support Program-for-Results. https://documents1.worldbank.org/curated/en/731311512702123714/pdf/Jordan-Educ-Reform-121282-JO-PAD-11142017.pdf

Worsham, J., & Gatrell, J. (2005). Multiple principals, multiple signals: A signaling approach to principal–agent relations. Policy Studies Journal, 33, 363–376.

Annex A: Codebook

Accountability forum/channel	Reporting upstream	Reporting progress against indicators upon request or in routine meetings with senior elected officials or political sponsors such that spotlights are directed to specific outcome areas and reputation/performance during these reporting channels are under scrutiny.
	Disbursement of funds	Funds conditional upon reporting and achievement of pre-specified KPIs.
	Career-related incentives	Performance is reviewed based on achievement of pre-specified KPIs or priority outcome areas and consequences/rewards for achievement are linked to professional appraisals and/or prospects.
	Reputation/Esteem	Performance is linked to professional perception of agent's capability and competence. Comparative performance/data is used to attribute high esteem to an agent's performance.
	Publications/ public scrutiny	Performance against pre-specified KPIs is evaluated and published routinely for public consumption.
	Political	Electoral cycles, political appointments.
	Hierarchical	Ranks within the civil service or professional ladder within an organization.
Accountability Loci	Legal	Obligations set out in legally-binding contracts and funding agreements.
Oversight actors (evidence of multiple accountabilities)	Political appointment	This individual could be appointed or elected by the people and is the most senior official publicly responsible for the delivery of specific agenda or priorities.
	Senior civil servant	This individual is the most senior official within the bureaucracy in a given agency.
	External government agencies	Individuals from other government agencies that rank higher in the hierarchy.
	Donors/INGOs	Development banks, philanthropies, or international or local non-governmental organizations that provide funding and technical assistance for educational programs.
	Public	Citizens who are holding elected officials to account through their voting.
Accountable actor	Minister	
	Civil Servants	
Contextual features mediating accountability relationships	High turnover at head of ministry	This relates to the longevity of the minister's hold on their position as head of the organization. High turnover rates entail relatively short terms served by ministers of between six months and two years at most.
	Political sensitivity of priority area	This feature involves the extent to which the priority area is salient in political rhetoric and public discussions and debates. High political sensitivity involves the risk borne by elected and appointed political leaders of not being re-elected or serving a longer term. Such risk is made clear through public discourse, media coverage, (dis)content levels among citizens, public protests and demonstrations, etc.
	International investment in priority area	This entails a man-made or natural disaster or crisis for which the international community has mobilized. International organizations and political figures have committed politically and financially to addressing this topic area.
	Established Donor/INGO presence	Long-established roles and presence of foreign aid in education reform.
	Time horizon of relationship between donors and bureaucrats	The longevity of donors' working relationships with bureaucrats on the same set of medium- to long-term priorities (six months to five years).
	Task duplication	Task is taken up by various stakeholders over an extended period of time, and there are multiple versions of the task outputs. Task funded by multiple funding sources for the same outputs.
	Task re-orientation	Task goals and outputs keep shifting. Directives change across principals and bureaucrats' actions are in a similar state of flux.
	Task stalling	Tasks continue on the same course but stalled to weather any changes in goals, directives, outputs, etc.
	Mixed	A combination of any or all of the above.

List of Acronyms

B.Ed.	Bachelor of Education
CPI	Centre for Policy Impact
DA	Delivery Associates
DCU	Development Coordination Unit
DEEP	Data and Evidence for Education Programs
DFID	Department for International Development
DLI	Disbursement-Linked Indicator
ECD	Early Childhood Development
ECED	Early Childhood Education and Development
EDRIL	Evidence-Driven Results in Learning
EGMA	Early Grade Mathematics Assessment
EGPA	European Group for Public Administration
EGRA	Early Grade Reading Assessment
ERfKE I	Education Reform for the Knowledge Economy phase I
ERfKE II	Education Reform for the Knowledge Economy phase II
ERSP	Education Reform Support Program
ESP	Education Sector Plan
ETC	Education Training Centre
FCDO	Foreign, Commonwealth and Development Office
GAC	Global Affairs Canada
HRD/HRDS	Human Resources Development/Human Resources Development Strategy
ICT	Information and Communication Technology
INGO	International Nongovernmental Organization (NGO)
IoE	Institute of Education (University College of London)
ITE	Initial Teacher Education
JERS/JERSP	Jordan Education Reform Support/Jordan Education Reform Support Program
KIIs	Key Improvement Indicator
KPI	Key Performance Indicator

List of Acronyms

M&E	Monitoring and Evaluation
MEL	Monitoring, Evaluation, and Learning
MOE/MoE	Ministry of Education
MOHE	Ministry of Higher Education
MOPIC	Ministry of Planning and International Cooperation
NAfKE	National Assessment for the Knowledge Economy
NCCD	National Centre for Curriculum Development
NCHRD	National Committee for Human Resource Development
NPTS	National Teacher Professional Standards
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
OPM	Oxford Policy Management
PISA	Programme for International Student Assessment
PIU	Project Implementation Unit
PMDU	Prime Minister's Delivery Unit
PMO	Prime Minister's Office
PPCC	Policy, Planning, and Coordination Committee
QRAE	Queen Rania Award for Excellence
QRF	Queen Rania Foundation
QRTA	Queen Rania Teacher Academy
R&E Unit	Results and Effectiveness Unit
RAMP	Reaching and Mathematics Project/Program
RHC	Royal Hashemite Court
SDDP	School and Directorate Development Program
SOP	Standard Operating Procedure
TEPD	Teacher Education Professional Diploma
TIMSS	Trends in International Mathematics and Science Study
TVET	Technical and Vocational Education and Training

List of Acronyms

TWG	Technical Working Group
UCL	University College of London
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development