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Education Development Trust

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United Nations
Educational, Scientific and
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International Institute
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Change agents
Emerging evidence on instructional leadership at the middle tier

the Education Commission

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List of abbreviations

BOET	Sub-district Bureau Office for Education and Training (Vietnam)
CPD	continuous professional development
CRCC	Cluster Resource Centre Coordinator (India)
DEO	District Education Office
DESB	District Education Bureau (Lao PDR)
DM	District Manager
DOET	District Office for Education and Training (Vietnam)
ENEM	national secondary school exit exam (Brazil)
MAT	monthly assessment tests
MLG	Ministry of Local Government
MoE	Ministry of Education
MT	Mentor Teacher (Delhi, India)
NAEL	National Academy for Educational Leadership (Wales)
PA	Pedagogical Advisor
PEA	Primary Education Advisor
SBM	school-based management
SPAECE	state evaluation assessment for basic education (Ceará, Brazil)
TAC	Teacher Advisory Centre
TCP	Teacher Career Pathways (New York City)
TDC	Teacher Development Coordinator (Delhi, India)
TTL	Teacher Team Leader (New York City)

About the project

IIEP-UNESCO, Education Development Trust and the Education Commission have, since 2018, established a joint agenda in researching and strengthening roles at the middle tier of education systems. This paper is the fruit of this collaboration.

To enrich this reflection, IIEP-UNESCO, together with Education Development Trust, are currently conducting field research into international case studies of promising practice looking at the rise of expert practitioners who are promoted to leadership roles at the 'middle tier' of education systems, working across schools and localities to improve teaching and learning. A report is due for publication in 2021.

IIEP-UNESCO is dedicated to supporting educational policy, planning and management. It develops the capacities of education actors to plan and manage their systems through its programmes of training, technical assistance, policy research and knowledge sharing. This current work draws on two strands of research where IIEP has a longstanding expertise: teacher management and decentralisation policies. In particular, its latest research on teacher career reforms highlighted that teacher support, collaboration, trust and continuous professional development are key ingredients for improving teacher motivation and practice, and that workforce support structures are essential at all levels of the education system.

Education Development Trust is an international not-for-profit organisation working to improve education outcomes through expert research and intelligent design and delivery of school improvement programmes at scale. It has published a series of research reports on successful international school reforms in recent years – from Vietnam to London – including new evidence on system leadership and innovations in school collaboration. Many of the organisation's large-scale programmes include an element of teacher professional development, and have demonstrated considerable success in raising student learning outcomes as a result of innovations in roles such as pedagogical coaching and supervision. Education Development Trust collaborated with the Education Commission as co-authors on the Education Workforce Initiative's *Transforming the Education Workforce*.

The Education Commission is a global initiative dedicated to greater progress on Sustainable Development Goal 4 by mobilising strong evidence and analysis while engaging with world leaders, policymakers, and researchers. It established the Education Workforce Initiative to gather evidence and catalyse new thinking on transforming the education workforce – including not only teachers, but also other roles at all levels in an education system. In its flagship report, *Transforming the Education Workforce*, it is explicit in calling for greater investment and strengthening of district level roles as instructional leaders to support inclusion, equity and learning outcomes.

About the authors

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Acknowledgments

Executive summary

A major concern for education policymakers is how to achieve teaching and learning quality at scale. An important question which has therefore come into sharp focus is: how can we design the whole education system for high-quality instructional delivery? This paper aims to make a significant contribution to this debate by looking closely at the middle part of education systems – the regional, district, and sub-district level – as a critical part of the 'machine' for quality teaching and learning at scale. Rather than bureaucrats sitting as 'cogs in the administrative wheel' (Banerji and Chavan, 2016: 465), we see the potential of these middle-tier actors as a cadre of change agents who work directly with schools and teachers, and who are dedicated to instructional change and professional learning. Such roles include advisors, pedagogical coaches, and teacher mentors. While middle-tier actors are key intermediaries in education systems, their role in teaching and learning improvement has been often overlooked in prior research and policy debates. These issues often stemmed from a combination of limited visibility to policymakers and frontline school professionals, and a limited capacity to act as instructional leaders.

This paper argues that these roles are key to improving the quality of teaching and learning, while aiming to offer new information and analysis with regards to the following questions:

- What is the middle tier? Why has its role in providing instructional leadership been neglected?

- Why are instructional leaders at the middle tier uniquely positioned to play a relevant role in improving the quality of instruction and teacher professional learning?

- What barriers exist that can constrain middle-tier instructional leaders' capacity to act?

- What promising practices and innovations exist at the middle tier where instructional leadership roles have been enhanced? What strategies have been used to address barriers to change and with what results? What are enabling conditions for them to act as agents of change?

- What research gaps exist?

A review of recent evidence confirms that middle-tier positions deliver improvements to teaching and learning in four main ways: by providing support, collaboration opportunities, accountability and monitoring, and instructional direction and system alignment.

When middle-tier professionals such as pedagogical coaches or supervisors offer support for teachers' professional growth or for school-based training, this has a positive effect on instructional quality and student outcomes. They also play an important role in teacher-led collaborative professional development, offering important services such as facilitating the organisation of cluster structures, sharing expertise, and providing external inputs to teacher networks. This supportive role must be carefully balanced with oversight and accountability functions. Positive results have emerged for students and teachers where accountability focuses on building school and teacher capacity and improving the motivation to change. Finally, there is evidence that a strong vision – and, in some cases, a strong instructional vision – at the middle tier is associated with positive student results.

Nevertheless, in reality, the capacity of middle-tier professionals to act is often constrained. This can be explained in part by historical difficulties associated with the decentralisation process in education systems, resulting in weaknesses in the institutional and organisational setup of structures at the middle tier. It is also a result of weak systems across the workforce lifecycle, from recruitment to ongoing training and talent management. Constraints at the middle tier are important to take into consideration when analysing the potential for reform and capacity to transform teaching and learning, as these issues are not only enduring in many systems, but are also not easy to address. However, when due attention is paid to lifting those barriers, and innovative strategies are put in place to strengthen these roles and workforce systems, the pace of change is increased.

Improving teaching and learning outcomes is a priority for all governments, and issues linked to teacher support and development have received significant attention from international organisations and independent researchers. Even so, few have investigated the potential of the middle tier to act as a change agent in school-level improvement. The literature is clear that it is critical that middle-tier actors are involved in reform design and formulation, and play a central role in facilitating the implementation of teaching and learning reforms. Evidence suggests that middle-tier professionals can be lynchpins in education reforms when they build the trust of stakeholders, such as teachers and school leaders, and develop a culture of school improvement. The position of these roles within the structure of an education system – and their importance as a function that sits close to schools – is fundamental in creating and maintaining a link between policy and practice.

Introduction
Scaling, systems thinking and the middle tier

The achievement of quality teaching and learning at scale is a growing concern for education policymakers around the world.

Faced with an abundance of education innovations which work well in small pilots or under specific conditions, attention has turned to a lively debate about the pathways to scale (for example, Rincon-Gallardo, S. and Fleisch, B. 2016; Brookings Institute 2016). One of the key themes coming out of this debate has been a call for more focus on the 'architecture' of education systems: the delivery structures, the key workforce roles and the leaders who will reform teacher instructional practices (Education Commission 2019; Gibbs *et al* 2020):

'Scaling-up an intervention found to work in a randomized trial run by a specific organization […] requires an understanding of the whole delivery chain. If this delivery chain involves a government Ministry with limited implementation capacity […] agents may respond differently than they would to an NGO-led experiment.' (Bold *et al.*, 2013)

'[We need] insight into how the particular government […] works as an organization, which we have referred to elsewhere as getting 'inside the machine' (Banerjee 2007) *or as fixing the 'plumbing'* (Duflo 2017)*.'* (Banerjee *et al.*, 2017).

An important question which has therefore come into sharp focus is: how can we design the *whole system* for high-quality instructional delivery? This paper aims to make a significant contribution to this debate by looking closely at the middle part of education systems – the regional, district and sub-district level – as a critical part of the 'machine' for quality teaching and learning at scale.

At IIEP-UNESCO, Education Development Trust and the Education Commission, as researchers and practitioners in school system reform, we believe that better understanding this middle level of the education system is critical. We also believe that it is also full of potential. One of the most promising developments we see in terms of teaching and learning is the renewed attention towards instructional leaders: those middle-tier professionals whose main functions are geared towards teacher support and development.

Rather than bureaucrats sitting as 'cogs in the administrative wheel' (Banerji 2016), we see the potential of these professionals as a cadre of change agents who work directly with schools and teachers, and who are dedicated to instructional change and professional learning. Such roles include advisors, supervisors, pedagogical coaches and teacher mentors. It is these professionals – who are the closest personnel to the school in the wider government machinery – who will make sure that new practices both reach and are sustained within every classroom.

In this paper, we argue that some of the most promising and sustained school quality reform initiatives in recent times – with clear gains in teaching and learning quality – have a hidden story behind them: a story of change at the middle tier.

Recent evidence and promising innovations

Although good evidence exists on the value of instructional leadership at school level (for example, see GEMR, 2017), there is a gap in coherent evidence on instructional leaders at the district level and advances in their practice. However, recent evidence confirms that these professionals are essential for effective system leadership and reform, and that they play a key role in taking effective education interventions to scale (see, for example, Leithwood, 2010; Fullan, 2015; and Gibbs *et al*., 2019). What we are observing is how middle-tier roles can be lynchpins in education reform, and that *how these actors work* to support teacher professional learning and instructional practices is as important as how their roles are designed and structured.

In this paper, we explore this evidence, looking at more established concepts and ideas about the middle tier to date, as well as recent innovations and new trends. In doing so, we aim to fill some of the evidence gaps and

offer preliminary theoretical concepts to aid consideration of how this level of the education system adds value to teaching and learning outcomes. Our hypothesis is that school systems that experience successful change see a shift from viewing those in the middle tier as top-down 'deliverers' of services to utilising them as change agents who can partner with schools to develop a culture of school improvement.

Objectives and research questions: the middle tier as change agents

This paper will argue that roles in the middle-tier workforce which are dedicated to instructional leadership and professional learning are key to improving the quality of teaching and learning. Our aim is to offer new information and analysis with regards to the following questions:

- What is the middle tier? Why has its role in providing instructional leadership been neglected?

- Why are instructional leaders at the middle tier uniquely positioned to play a relevant role in improving the quality of instruction and teacher professional learning?

- What barriers exist that can constrain middle-tier instructional leaders' capacity to act?

- What promising practices and innovations exist at the middle tier where instructional leadership roles have been enhanced? What strategies have been used to address barriers to change and with what results? What are enabling conditions for them to act as agents of change?

- What research gaps exist?

In exploring these questions, we reflect on critical issues and approaches for future research in this important area of education system reform.

Terminology and scope

The scope of this paper is what we refer to as the 'middle tier': those intermediary bodies and actors that operate between the school and the central policymaking level. This is a complex domain for research: a wide range of roles and functions fall within scope and the terminology is not standardised. For example, the term 'middle tier' is commonly alluded to in the UK, where it is used loosely to refer to all the intermediary bodies and actors that intervene between the school and the central level. In other parts of the world, the term 'district' is more commonly used, similarly often to refer to all intermediary levels and not only to the specific administrative unit of a 'district'.

We therefore use the term 'middle tier' in this paper to cover a broad range of functions and roles. The search terms also included 'district' which, as described above, is commonly used (for example, in reviews of education research such as the World Bank's World Development Report (2018), Snilstveit *et al*. (2016), and Glewwe and Muralidharan (2015)). Evidence on middle-tier roles is also found within a broader literature on governance, including discussions about decentralisation, accountability, leadership and management. The term 'meso' is also being used in education policy, but with widely different definitions attached depending on the context (see, for example, UNESCO IITE, 2012; Boeren, 2019; Yousuf and Zualkernan, 2015).

For these reasons, in the rest of this paper, we will be using the terms 'middle tier' and 'district' interchangeably.

The terminology broadens further when searching for specific roles and functions within these systems, making uniform search results across countries difficult. We have included terms such as 'pedagogical adviser', 'teacher mentor', 'inspector', 'supervisor', 'instructional coach' and 'cluster co-ordinators' in our search.

Note that the middle tier is not to be confused with middle leaders at school level. Middle management positions *within* schools, such as subject leaders, team leaders, or department heads, as discussed in numerous other studies (i.e. Grootenboer, Edwards-Groves, and Rönnerman, 2015; Farchi and Tubin, 2019; Bennett *et al*., 2007), are not within the scope of this review.

This paper covers a wide range of geographies and takes into consideration contextual differences in education systems, including culture, governance arrangements and resource availability. Whilst we intend to draw out helpful commonalities and cross-cutting themes, we recognise that local contexts result in a remarkable variety of roles, functions and challenges faced at the middle tier.

Method

This review draws on a wide range of sources and various education disciplines. In addition to research and studies produced by IIEP-UNESCO and Education Development Trust, the work builds on a documentary search in databases accessible via the IIEP EPIDOC, Google, and websites of major international and bilateral development agencies. Sources range from academic articles and reports from individuals and major international organisations to case studies examining district leadership from national or regional perspectives.

Although it is based on an extensive review of available documents, the paper does not claim to be comprehensive in strictly following the methodology of a systematic rigorous literature review.[1]

Limitations

This paper looks at promising practice at the middle tier where there is some evidence of impact on instructional quality or student outcomes. However, it can be challenging to determine cause and effect for such a broad set of actors, and for actors who are removed from the frontline. As Barber, Whelan, and Clark note, 'Leaders in the middle tier are further from students and learning than school leaders, and their influence is mediated by a large set of other factors and actors. As a result, it is harder to measure their impact on student learning' (2010: 23). Also, the wide range of 'other factors' to consider vary between countries, such as education system structure, political movements, and available resources, making comparison challenging.

Data on education sector staff by category and by job is scarce or difficult to access in many instances, in particular for low- and lower-middle-level income countries. In fact, it is a challenge to define and inform meaningful indicators to assess the workforce available from both quantitative and qualitative angles. In particular, the professional attitudes and behaviour of middle-tier staff have hardly ever been systematically investigated.

Structure of the paper

Chapter 1 explores what we mean by the 'middle tier'. It also reviews common structures at the middle tier and makes a case for why we should be interested in instructional leaders at that level. Chapter 2 explores how professionals at the middle tier can act as change agents to improve teaching and learning outcomes, specifically focusing on support, accountability and monitoring, collaboration, and leadership. In Chapter 3, the challenges faced by the middle-tier workforce are reviewed. Chapter 4 analyses recent evidence of innovative instructional leadership roles or contexts where existing roles have been enhanced, questioning what is different about these roles and how they have been designed, and how they bring about change. The final chapter provides a brief synthesis and discusses future directions.

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[1] Systematic rigorous literature reviews employ methods to select only those studies that meet specific criteria of validity and reliability which confirm the rigour of the 'evidence' produced by previously published studies. (See e.g. the approach promoted by DFID: https://eppi.ioe.ac.uk/cms/Researchprojects/Developingeconomies/InternationalDevelopment/DFIDEducationRigorousLiteratureReviews/tabid/3437/Default.aspx

Chapter 1
Why look at the middle tier? Definition and rationale

This chapter explores what we mean by 'middle-tier' professionals. As a first step, we offer a background and definition of the middle tier in the context of educational decentralisation, as well as an analysis of why these professionals' roles in education quality improvement have tended to be neglected. We also review common structures at the middle tier and make a case for why we should be interested in promising examples of instructional leadership at this level.

1.1 What is the middle tier?

The middle tier has developed over recent decades as part of the expansion of education systems and trends towards decentralisation. This section highlights the varied nature of structures and roles that this level encompasses across different countries.

1.1.1 An important intermediary in increasingly decentralised education systems

Lynchpin between central policy and local delivery
Middle-tier responsibilities have typically expanded in recent years. Because of the expansion of education systems to meet rising enrolment in recent decades, many countries have been implementing decentralisation policies, transferring responsibilities from central to lower levels. A range of actors, such as the District Education Office (DEO), are therefore typically in charge of activities that ministries of education (MoEs) are not able to carry out at a distance. While middle-tier actors have traditionally been responsible for school and teacher supervision, their responsibilities have greatly expanded in the context of decentralisation (IIEP-UNESCO, 2017; De Grauwe and Lugaz, 2011*a*; 2011*b*). Box 1.1 offers a definition of the middle tier that will be used throughout this paper.

In most countries, defining the vision and strategy for the education sector is the prerogative of the central level. However, the middle tier can participate in defining this vision, and has a key role in communicating and creating ownership of this vision at the lower levels of education systems, translating it into concrete strategies and practices. According to Michael Fullan, the middle tier can 'develop greater overall system coherence' by strengthening the integration of the larger system goals to local needs and situations (Fullan, 2015: 24).

A variety of middle-tier structures and roles
The middle tier – broadly defined as any local institutions, structures, networks, and roles sitting between the school and the state level with a quality improvement function – can take a variety of forms across different jurisdictions.

Small education systems typically have fewer intermediate actors between schools and the ministry of education, and school principals take responsibility for functions such as teacher evaluation and professional development. Meanwhile, larger systems may have several layers of intermediate units.

Box 1.1 What we mean by the middle tier

Middle-tier actors act as intermediaries in education systems, and are responsible for implementing and monitoring national education policy at the local level. They are the representatives of the ministry closest to the schools, playing a pivotal role in improving education systems:

[The district education office] represents a middle layer of governance, linking central administration with schools and local government by providing direct support to schools, acting as a buffer between schools and education ministries, and providing a channel through which to share and integrate improvements across schools (IIEP-UNESCO, 2017: 2).

Aston *et al*. describe the middle tier as 'the diverse range of bodies that operate between schools and central government to support school-led improvement' (2013: 1). Likewise, Mourshed, Chijioke, and Barber refer to it as an 'integrator and mediator between the classrooms and the centre' (2010: 81), comparing it to a computer's operating system that connects the user (teachers and schools) to the central processing unit (central education authorities).

Sources: IIEP-UNESCO (2017); Mourshed, Chijioke, and Barber (2010); Aston *et al*. (2013)

The precise functions undertaken at the middle tier depend on the nature of decentralisation. For example, Uganda has enacted a decentralisation model based on devolution in their education system, which makes district offices accountable to both the central ministry of education and local government officials (Kayabwe, 2014). In contrast, Lesotho has a system of deconcentration, which enhances the authority of the district office to that of the central ministry when dealing with issues of human or financial resources (Lefoka and Tsepa, 2014).

Furthermore, middle-level actors may have different names, even if their functions and duties are similar. For example, IIEP (2017) notes that district-level entities with similar roles are known as 'zonal education offices' in Sri Lanka and 'district education departments' in Uganda.

The middle tier can also refer to school clusters or networks that have a role in overseeing school quality and improvement beyond an individual school. School head

teachers acting in a system leadership capacity, with responsibility for support and supervision of schools beyond their own, can also be considered as being part of the middle tier.

1.1.2 'What you see is all there is': a neglected actor in narratives on education quality improvement

While middle-tier actors are key intermediaries in education systems, their role in teaching and learning improvement has been often overlooked. This section reviews some of the reasons for this trend.

Lack of visibility

Previous lines of research have tended to undervalue the middle tier's importance in improving education quality, sometimes completely omitting it from the narrative. Rorrer, Skrla, and Scheurich (2008) highlight a variety of research from the 1980s and 1990s (i.e. Doyle and Finn, 1984; Finn, 1991) which asserts that the school was the most important aspect of education reform, including for initiating and implementing systemic change.

Despite their closest position in the system to schools and teachers, middle-level actors can often be invisible and of little interest to the public. Leithwood uses Kahneman's notion of 'What you see is all there is' to explain why the entire onus of education quality is generally placed on schools, teachers, and principals:

'[M]ost members of the public attribute what students learn exclusively to the very visible schools, teachers and principals with whom they have direct contact. While this lack of visibility should not be equated with lack of contribution...it does substantially increase the vulnerability of districts in times of change, especially when such change entails reduction of resources. So the case for districts needs to be made explicitly; it will not make itself' (Leithwood, 2013: 9).

Limited capacity to act

The middle tier's lack of visibility may derive from its limited capacity to act, in terms of its resource, authority and autonomy. The transfer of responsibilities through the decentralisation process has not always been accompanied by an increase in this capacity. Through their research on DEOs in three sub-Saharan African countries, De Grauwe and Lugaz (2011*b*) find that DEOs have little autonomy in the management of their human and financial resources and are not engaged by ministries of education in policy design. This leads to a paradoxical situation where DEOs are asked to plan and act strategically according to their priorities, but without having the capacity to do so. De Grauwe and Lugaz conclude:

'The role of the DEO has not moved much beyond school supervision and some administrative tasks. In contradiction of our...hypothesis, the increased importance of an active DEO, as a key element between ministry and schools and as the guarantor of the successful implementation of national policies, is not recognized' (De Grauwe and Lugaz, 2011*b*: 140).

At the same time, decentralisation has placed additional demands on middle-tier actors, requiring new skills and competencies. Bruns, Filmer, and Patrinos note that the 'highly decentralised nature of education services at the point of delivery makes them extremely demanding of the managerial, technical and financial capacity of governments' (2011: 15). For example, a study in 11 Southeast Asian countries revealed that strategies included decentralisation of teacher training and teacher professional development and, in half of the countries, of curriculum development (SEAMEO, 2012). A similar challenge was observed in Uganda:

'Strengthening leadership and management of a decentralised education system requires work not only at the district level but at the sub-county and even the parish levels. Strategies are complicated, entailing not only training in technical skills such as budgeting and data monitoring, but also higher-level skills such as political leadership and cross-institutional collaboration. The number of districts whose capacity is inadequate for the tasks at hand multiplies the challenge' (Namukasa and Buye, 2007: 107).

The rise of school-based management

School-based management (SBM) policies have become increasingly popular in recent years, with the rationale that school-level actors have a better knowledge of the needs of their learners and teachers, and are in a better position to develop relevant staff professional development activities (Abu-Duhou, 1999). While countries such as New Zealand or the United States of America have been implementing SBM policies since the 1990s, in more recent years, such policies have been promoted as solutions to improve the quality of education in middle- and low-income countries (Abu-Duhou, 1999; De Grauwe and Lugaz, 2011*a*). The World Bank is advocating for the introduction of SBM policies in these contexts, to the point that 50% of the operations approved by its Education Sector Board for the fiscal year 2012 contained school decentralisation components (Channa, 2015).

As a result of this trend, perhaps less attention has been paid to middle-tier structures and their potential impact for improving teaching and learning, as SBM takes the individual school as the primary unit of decision-making and improvement.

1.2 A renewed interest in support roles

Traditionally, attention to middle-tier systems focused on supervision and inspection: many MoEs saw middle-tier actors primarily as compliance monitors (IIEP-UNESCO, 2017). Teacher support and professional development functions have historically received less interest, but there are signs that this is changing.

1.2.1 The recurrent tension between teacher control and support roles

Whist professionals need to be both managed and supported, finding the right balance is not easy. Management and support functions attached to the middle tier have traditionally been carried out by school supervision and support services, which Carron and De Grauwe (1997) defined as 'all those services whose main function is to control and evaluate, and/or advise and support school heads and teachers'. While these services have at times had very positive impacts, the tension between control and advisory functions, and the often-observed predominance of control behaviour among inspectors, have long been subjects of debate (OECD, 2009, 2013; Eddy-Spicer *et al.*, 2016). Inspectors are widely criticised for spending too little time on listening to and advising teachers (Carron and De Grauwe, 1997; De Grauwe and Lugaz, 2011*a*, 2011*b*).

Some countries have therefore reformed their school inspection systems to differentiate between control and support functions (for example, by making a distinction between inspectors and pedagogical supervisors or advisors, who are in charge of professional development and support services to teachers, but have no role in formal appraisal). However, the tension between these functions often remains, which we explore further in Chapter 3.

In addition, there is growing policy consensus that investing in teacher support and quality, supported by instructional leadership, is critical to improving learning (World Bank 2018; Bruns and Luque, 2014; Bruns, Macdonald, and Schneider, 2019; OECD, 2011, 2018). At the same time, this area is under-researched: 'school support receives considerably less attention in the literature than supervision, which might be a reflection of their relative importance in most countries' (Carron and De Grauwe, 1997: 1).

As a result, this paper focuses on instructional leaders, at times also referred to as 'professional learning leaders', at the middle tier or district level – those who can support the improvement of teacher instructional practice.

Box 1.2 Instructional leaders: definition for this paper

Instructional leaders support and develop high-quality instructional practices in schools. They are leaders of learning in that they support teachers and school leaders in their practice and professional growth, and, as part of this, they have an explicit focus on improving student outcomes. Their role may include developing and implementing policies that support student achievement, developing learning communities, providing feedback on instruction, modelling effective instruction, and supporting the use of assessment data.

Source: Adapted from Ainley and Carstens' (2018) definition of instructional leadership

Summary

Uniquely positioned between local and national levels, the middle tier plays a crucial role in enabling teachers and school leaders to pursue improved education quality, and there is growing recognition of its importance to educational systems. Middle-tier structures and responsibilities vary by country, but generally the middle tier's functions are evolving to focus on support as well as control, leading to some middle-tier personnel acting as instructional leaders. The next chapter explores how these personnel can be powerful change agents in improving teaching and learning.

1.2.2 Instructional leadership capacities are more likely to exist at the district level

A major limitation of a simplistic approach to SBM is that the quality of schools often remains constrained by the weak capacity of individual head teachers to act as instructional leaders (De Grauwe and Lugaz, 2011*a*). A number of project evaluations and comprehensive reviews in both low- and middle-income countries and high-income countries (for example, Jones *et al.*, 2019) show that school heads often lack the capacity and motivation to engage effectively in pedagogical support and advisory functions, or that they lack objectivity in dealing with their teaching staff (Australian Department for Foreign Affairs, 2015; Williams, 2017; Bill & Melinda Gates Foundation, 2014; Jerald, 2005).

In contexts where capacity at school leadership level is still weak, a more promising strategy may be to identify talent at district level and leverage those skills to support a group of schools to improve.

Middle-tier actors are also well positioned to facilitate exchange and mutual support among schools, providing much-needed spaces for collaborative learning and critical reflection on instructional practice (UNESCO, 2017). Consequently, even programmes based on SBM approaches benefit from the support and coordination of middle-tier staff. One such example is the 2018 Education Workforce Initiative (created by the Education Commission), which acknowledges the importance of district officials and their 'increasingly critical roles in new scenarios' (Wolfenden *et al.*, 2018: 27).

Chapter 2
The potential of the middle tier as instructional leaders

Several recent international studies of reforms in education leadership set out a vision for middle-tier professionals acting as instructional leaders. Middle-tier leaders are seen as directly interfacing with school leaders and teachers, and as having a direct influence on instructional quality.

What are the professional practices that these studies identify? Whilst the literature on school-level instructional leadership is now well established, less explicit analysis has been undertaken about the roles and practices at the middle-tier level.

Through case study review and an analysis of themes emerging from the literature, this chapter suggests that four key functions played by middle-tier personnel are of particular interest for instructional improvement:

- Providing support for school and teaching improvement
- Promoting professional collaboration
- Ensuring accountability and monitoring
- Providing local leadership and strategic direction.

The chapter explores how, through these four functions, middle-tier role-holders can act as change agents to improve teaching and learning in schools, and why they are uniquely positioned to do so.

2.1 Instructional leaders at the middle tier can play an important role in providing support for school and teaching improvement

A strong middle tier has been instrumental in several recent successful teacher professional development initiatives, as well as in promising reforms of school leadership development. International evidence suggests a range of recent promising practices in this area. Promising features include a shift in the focus of interventions from controlling to supporting teachers, as well as the development of professional development programmes geared towards direct and regular support to teachers.

2.1.1 The middle tier as a partner for school professionals: redressing the balance between compliance monitoring and support for professional development

Supporting teachers
Recent evidence suggests there is a positive effect when middle-tier professionals shift their focus from supervision, control and compliance monitoring to continuous professional support for teachers, including the provision of diagnostic feedback (Education Commission, 2019). For example, an extensive review by Eddy-Spicer *et al*. (2016) of accountability interventions in low- and middle-income settings finds very little evidence of impact when accountability reforms, including those by middle-tier personnel, focus solely on supervision and high-stakes monitoring. The review highlights the importance of support, capacity building, ownership of school improvement priorities, and constructive feedback: 'supervision can be effective when it includes: support for school self-evaluation, building school capacity, ensuring schools have access to improvement resources, and providing feedback in a respectful and constructive manner' (Education Commission, 2019: 86; Eddy-Spicer *et al*., 2016).

Commentators on reforms in the Western Cape of South Africa (see Box 2.1) observed this shift taking place as part of literacy and numeracy reform. Analyses of these reforms

Box 2.1 An ethos of partnership and support: an example from literacy and numeracy support programmes in the Western Cape of South Africa

The Provincial Department of Education decided early on in its journey that it needed to incorporate an approach that was responsive to the wide range of schools' needs across the province. However, it was clear that it could not leave responsibility for its plans for improvements in outcomes with individual schools: the capacity constraints were too great, student outcomes too low, and the need to improve too urgent. It therefore needed a different approach.

In 2002, the Provincial Department halted a centrally run, expert-led process for developing a new curriculum, which was failing to achieve the desired results, and called the district leaders together in order to develop a literacy strategy. Together, they defined three areas of improvement on which each district was required to focus: teacher development and support; the provision of resources and learning materials; and research and advocacy. Within this framework, however, districts would be free to adopt different approaches to implementation in response to how they defined their schools' needs.

As the level of support increased significantly (for example, through the provision of teacher PD and learning materials), the relationship changed from one of occasional visits from the province or district, to one in which a team was housed 'on the doorstep of the schools.' The tone of the interaction changed too. Previously, schools felt 'inspected', but the new relationship was underpinned by a commitment to partnership and support. Every week, teams meet to discuss the school visits and how to solve the challenges they face. They are then able to draw support from the district as needed, as well as from the province or third-party partners such as NGOs and community organisations active in the area.

Source: Mourshed, Chijioke, and Barber (2010: 83-86)

by Fleisch (2016) and Mourshed, Chijioke, and Barber (2010) describe a significant shift in the focus of middle-tier roles, from district officials with a preoccupation with inspection, to new coach roles focused on dialogue and professional support:

'In a system where teachers had in the previous two decades actively resisted classroom visits by district officials, the [programme] coaches made over 120,000 successful visits in the first three years; experiencing almost no opposition from teacher unions. This suggests that the coaching process has gained the trust of teachers. [...] Opening up of classrooms to outsiders and, by extension, the opening up of the actual new instructional practice to external appraisal has enhanced professional accountability' (Fleisch, 2016: 445).

Similarly, Colbert and Arboleda's (2016) recent analysis of the at-scale success of Escuela Nueva in Colombia also mentions a radical change in the role of middle-tier administrative personnel such as supervisors and heads of clusters:

'[The programme] seeks to promote a guiding and collaborative relationship with teachers, rather than a rigid and controlling one, and encourages professional development through action research...Administrative agents—that is supervisors, heads of clusters of school or principals—their role was seen as orienting rather than controlling...That way they become a resource person and a technical support to the teachers. This shift in the role of administrative agents served as a potent motivator for teachers to continue the innovation' (Colbert and Arboleda, 2016: 391).

The supportive middle-tier leader is not to be confused with a leader who tolerates poor performance or the status quo. In these examples, the middle-tier leader offers constructive feedback and challenge, in a relationship of mutual trust and support for teacher professional growth.

Giving more attention to support roles requires a change in attitude across the whole system. This has been identified as an underlying challenge in teacher supervision literature for decades, and yet many education systems still fail to consider how to solve 'educational problems [together] with teachers' (Lyons and Pritchard, 1976: 15). As Carron and De Grauwe point out 'This is, of course, easier said than done since it involves a fundamental change in attitude not only on behalf of the inspectors but also of all actors involved in managing the education system' (Carron and De Grauwe, 1997: 56).

Supporting school leaders

A middle tier which develops supportive partnerships at the level of the school leader has also been a feature of many promising reforms. Leithwood (2013), in his extensive analysis of successful districts in the USA and Canada, identifies school leadership development as one of the key aspects of successful districts. He discusses this as a 'high leverage strategy', since there are relatively few school heads within districts, meaning that their improvement can reach many teachers under their influence. In his analysis, key features of district support to school leaders resulting in improved student outcomes include:

- Developing partnerships with school leaders aimed at the improvement of student outcomes

- Aligning school improvement plans with district objectives

- Providing regular feedback to school leaders about how they might improve their practice

- Using all of this information at district level to adjust professional learning opportunities for principals.

Leadership from the middle tier is particularly important in contexts where school leaders are inexperienced or lack the proper training to succeed. Barber, Whelan, and Clark (2010) noted that middle-tier leaders can prove vital in supporting weaker schools or school leaders and can have a positive impact on the overall leadership of those schools. One system leader in Canada expressed this succinctly by saying 'many principals cannot be successful without the best possible district leadership' (Barber, Whelan, and Clark, 2010).

2.1.2 A shift to leading practice-based professional development

There is a growing consensus amongst researchers that successful professional development involves direct, individualised, and practical support to teachers, based in a school setting (Cilliers *et al*., 2018; Darling-Hammond *et al*., 2017). Evans and Popova's review identified pedagogical interventions and individualised long-term teacher training as key levers to improve teaching and learning in developing countries (2015).

Middle-tier professionals have a critical role to play in this practice-based professional development. In many examples of successful large-scale reforms, it is middle-tier leaders who provide this individualised teacher professional support, including roles such as:

- An itinerant coach

- A subject expert working across a cluster

- A school supervisor based at district level

- A 'system leader' who is a school-based practitioner and lends their time to support peer teachers in other schools.

By acting as trainers and coaches, these instructional leaders at the middle tier can be key actors in organising and delivering in-service training programmes. In Vietnam, for example, middle-tier professionals provide direct teacher professional development support by running training sessions equivalent to those found at the university level, as well as classes on pedagogical techniques (McAleavy, Thai Ha, and Fitzpatrick, 2018). In Lao PDR, the government has developed a strategic plan for district-level leadership to provide technical advice on literacy through pedagogical advisors who support teacher practice in schools. These pedagogical advisers are tasked with developing supporting aids for use in schools, as well as providing support directly to teachers and school administration (UNICEF, 2016).

This shift towards a philosophy of school-based continuous professional development (CPD) conducted by middle-tier professionals has underpinned several recent successful reforms. For example, the impact of Pratham's 'Read India' programme is well documented. In a recent analysis of how the approach was taken to scale, Banerji and Chavan (2016) comment that the Pratham team intentionally created 'leaders of practice' at cluster level, called cluster coordinators, who offer a 'learn by doing' style of academic leadership. They are described as 'people who guide and provide academic support, who can consistently do handholding, demonstration, mentoring and monitoring of teachers' (Banerji and Chavan, 2016: 465).

Another at-scale example is the Wasichana Wote Wasome (Kiswahili for 'let all girls learn') programme run by Education Development Trust in Kenya (2014-2017), which made extensive use of instructional coaches (Education Development Trust, n.d.). Coaches provided regular 1:1 school-based support to teachers in literacy and maths instruction, including tailored feedback and guidance. An external evaluation found that the programme shifted girls' reading outcomes by 0.52 standard deviation, providing over 90,000 girls with just under an additional year of learning compared to a control group (Coffey International, 2017).

Several leading thinkers in this area offer analyses of why this kind of school-based coaching support is proving to be so impactful. One of the key success factors is that this direct in-service support helps teachers to bridge the gap between theory and practice, so that they understand how to utilise effective pedagogical practices in their day-to-day teaching (Bruns, Costa, and Cunha, 2017; Mourshed, Chijioke, and Barber, 2010).

Box 2.2 Improving teacher performance through coaching programmes in Brazil

The intervention in Brazil had four components:

1. Performance feedback on teacher practice. At the beginning of the 2015 school year, treatment schools each received a two-page infographic 'bulletin' providing key results from classroom observations undertaken at the end of the prior school year, serving as a benchmark for the coming year.

2. Self-help materials. Each school's principal, pedagogical coordinator, and teachers received a copy of Aula Nota 10, which describes 'high-impact' teaching practices that stimulate student learning.

3. Face-to-face interaction with highly skilled coaches. Three different one-day workshops were delivered by eight members of the ELOS [consulting group] coaching team. The workshops exposed school directors and pedagogical coordinators to the goals of the programme and helped them to understand the feedback bulletins and how to use the results.

4. Expert coaching support via Skype. One expert trainer from the Sao Paulo team interacted regularly with each school's pedagogical coordinator via Skype. Treatment schools accessed a private website which featured good practice videos, their own uploads and other resources. The pedagogical coordinator would provide online feedback via the website on a weekly basis, about the number of classroom observations, activities implemented in the school, specific issues identified and addressed, and an assessment of progress.

The programme resulted in an increase in teachers' use of class time for instruction, by reducing the time spent on classroom management and time off-task. The programme also increased teachers' use of questions during their lessons, consistent with the coaching programme's goal of encouraging more interactive teaching practice.

Over the 2015 school year, these changes in teacher practice raised student learning in mathematics and Portuguese on both the Ceará state assessment, SPAECE, and the national secondary school exit exam, ENEM.

Source: Bruns, Costa, and Cunha (2017: 3)

A further example, this time from Brazil, is highlighted in Box 2.2, where an intense programme of coaching and training from expert coaches reported improved teaching results and small gains in student outcomes (Bruns, Costa, and Cunha, 2017).

Zavadsky (2016) also describes successful reforms in Long Beach, California, where an interesting coaching process involved multiple instructional leaders at the middle tier:

'Teams of instructional leaders and coaches visit schools and classrooms with a ''problem of practice'' in mind. During one of these visits, a team comprised of instructional coaches and school and district leaders observe a teacher implement a specific practice like using effective questions, and then provide feedback to the teacher and the school instructional coach with suggested next steps for improvement. The team returns at a later point to see how the skill has improved over time, and provide additional feedback' (Zavadsky, 2016: 516).

In countries where many teachers need to be trained and resources are limited or poor, in-service professional development programmes led by the middle tier prove a cost-efficient strategy to build teachers' capacities. To keep up with the Education for All mandate, many low- and middle-income countries hired a glut of teachers who have received little to no pre-service instruction. Developing in-service training and support is an efficient option to improve the quality of these new teaching cohorts. Such programmes are easier to update and improve than pre-service training programmes, and ministries of education typically have more control than they would in changing an entire pre-service curriculum (Popova, Evans, and Arancibia, 2016).

2.2 Instructional leaders at the middle tier can play an important role in promoting professional collaboration

Improved teacher and school collaboration has been a feature of several promising examples of school reform internationally. Professional learning communities and teacher resource groups are features of many school systems and typically exist to strengthen peer-to-peer learning within schools. International evidence is growing that this kind of professional collaboration can 'improve instruction and monitoring of teaching practices', since sharing experiences and presenting evidence can create an accountability effect for teachers (UNESCO, 2017: 79). Wider evidence that this translates into improved student outcomes is also building (Vescio, Ross, and Adams, 2008; Darling-Hammond *et al*., 2017).

The promotion of such collaborations is emerging as an important function for the middle tier. For example, citing a study across 45 districts in nine US states, Leithwood (2013) explains that how well-developed networks created by districts to encourage collaborative professional learning accounted for 17% of the variation in student achievement across districts. Similarly, based on a range of international case studies and international evidence, the Education Commission's Strengthening the Education Workforce report (2019) concludes that for such professional peer networks to flourish, support from a school- or district-level leader is critical.

Based on evidence from the work of Leithwood, the Education Commission and a recent study of communities of practice in Kenya and Rwanda (Rossignoli *et al*., 2020), the support provided by middle-tier professional can include:

• Offering logistical support and administrating the structures established to facilitate this exchange, such as school clusters, teacher advisory structures or professional learning communities

• Providing facilitation support, offering guidance and protocols to ensure collaborative working, or undertaking the facilitation role

• Playing an accountability role, ensuring that networking happens and learning is followed through in the classroom

• Offering pedagogical expertise and feedback, as a subject expert.

Furthermore, these professionals can identify high-performing schools and teachers and connect them with struggling schools, so expertise is leveraged effectively through collaborative working.

2.2.1 Learning through school networks and clusters

Beyond facilitating collaboration within schools, middle-tier personnel can foster peer-to-peer learning between schools and school heads. These relationships can be formalised through administrative arrangements such as school clusters or networks. By pooling expertise, resources, or simply day-to-day experiences of principals and teachers, these collaborative structures facilitated by the middle tier can lead to improved teaching and learning. Hargreaves and Braun (2010) saw in Ontario's interconnected school boards and districts 'dynamic forces for powerful educational changes':

'Middle-level leaders and school boards working together points to the power of professional autonomy as a force for change – but this is not the individual autonomy of isolated schools, but the collective autonomy of interconnected schools boards and their present and former leaders from central bureaucratic control' (Hargreaves and Braun, 2010: 97-98).

In Australia, for example, regional network leaders improve lateral learning among schools by promoting and managing specific goals and strategies with principals (Barber, Whelan and Clark, 2010). Singapore and Boston both established school cluster systems, which allowed for an open forum and means of peer support for principals within those groupings (Mourshed, Chijioke, and Barber, 2010). In Vietnam, districts require schools to compare practices through a system of peer review, meant for both accountability and support (McAleavy, Thai Ha, and Fitzpatrick, 2018):

'I think the whole business of working with other schools is also vital actually and I think that in the current climate...it's a way to ensure that there is that challenge, that can really only come from other schools and that's the culture now... we've all got to be outward facing and use the best schools to challenge each other' (English head teacher interviewed by McAleavy, Riggall, and Fitzpatrick, 2016: 17).

School networks have also been successful in Benin and Senegal, where De Grauwe (2009) notes that they have allowed both principals and teachers to exchange experiences and offer peer support and training for one another. Collaboration can be particularly effective in low-resource environments through school clustering or networking in which schools can pool their resources for more efficient utilisation (Bredenberg, 2000). However, as with all programmes and designs, collaborations and school clusters must be well run and coordinated to be effective. As Bray states, 'They are not a panacea, and international experience shows evidence of shortcomings and failures as well as successes' (1987: 142). That said, he also notes school clusters can indeed play a positive role in systems, as long as policymakers are realistic in their goals.

2.2.2 Reducing inequity through collaborative working

Another area of promising practice is in the important role middle-tier actors have played in reducing inequities across school localities. A range of international examples demonstrate how effective instructional leaders at the middle tier identify high-performing schools and teachers and connect them directly with struggling schools so as to enable collaboration directed at improvement. Middle-tier professionals can also facilitate reallocation of resources to target struggling schools.

Box 2.3 School-to-school pairing and collaboration in Rio de Janeiro

When in office, [Secretary of Schools] Costin regularly met with principals of the best-performing schools to discuss their success, and the leaders of the worst-performing schools to identify what was going wrong. One of the direct outcomes from such meetings was action to help schools to collaborate with each other:

'Every quarter I meet with the best-performing schools for lunch and discuss why they succeeded, and the worst-performing schools, and they received a godmother school, a school that is in the same area...that is having success, and together they plan how to transform learning in that school.'

Costin believed that it was the responsibility of high-performing schools to help those that were proving to be less effective and, underpinned by the extensive data she had collected, formally instigated such partnerships. Interestingly, she talked about how the effective and ineffective schools planned together. She talked not about the one-way transmission of expertise, but a respectful, collaborative relationship based on a shared commitment to the students of the area.

Source: Elwick and McAleavy (2015: 94-95)

Pairing schools as a means of collaboration

The middle tier can act as an intermediary to foster exchanges between schools with different levels of performance. For example, in the London Challenge reforms, participating middle-tier local authority leaders used a twinning technique to pair high- and low-performing schools so that the better schools could provide coaching and planning assistance (Elwick and McAleavy, 2015). Similar partnerships between schools were brokered by middle-tier leadership in Ho Chi Minh City (Elwick and McAleavy, 2015). As highlighted in Box 2.3, the Secretary of Schools for Rio de Janeiro personally ensured such school pairing by having lunch with high- and low-performing school principals once a quarter, leading to formal partnerships (Elwick and McAleavy, 2015).

Offering differentiated support

Examples from the United States of America showed that strong districts realigned resources to help support schools that underperformed. This helped to 'close the achievement gaps by ensuring that those students struggling the most have disproportionate access not only to financial supports but also high-quality teachers, and successful peer models, all of which make a demonstrable contribution to student achievement' (Leithwood, 2013: 17).

Barber, Whelan and Clark (2010), in their review of the middle tier in high-performing systems internationally, also identify 'supporting weaker school leaders' as a key feature of effective middle-tier leadership (see Figure 2.1). In other words, they prioritise the human resources (time and effort) to underperforming schools.

Figure 2.1 An international study of effective middle-tier leaders found that in most systems, over 50% of middle-tier leaders invest their time in supporting weaker schools
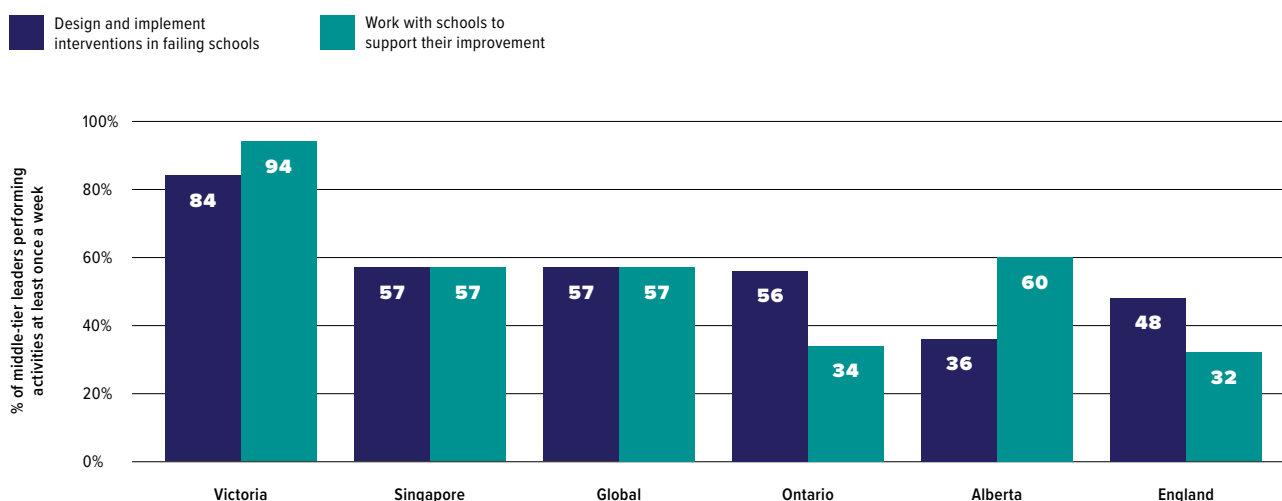
Source: International Survey of Middle-Tier Leaders 2010 in Barber, Whelan and Clark (2010: 24)

There are important nuances and contextualities to consider here, and in isolation, these findings do not support a case for decentralisation. Effective redistribution of resources by middle-tier professionals relies on capacity in terms of management and budgeting skills, and motivation. A recent study of the Big Results Now in Education programme in Tanzania looked at the impact of District Education Officers sharing school rankings with schools in a low-stakes accountability intervention. Researchers found no evidence over the study period of management action at district level being taken to support the lowest-ranking schools, despite the officers having considerable discretion over school human and physical resource allocations, such as financial grants and teacher allocations (Cilliers, Mbiti, and Zeitlin, 2019). In fact, the study found that the lowest-ranking schools responded to improve their results, but through excluding students from assessments.

Moreover, decentralisation of budget and resource distribution to district level is not always associated with positive student outcomes (UNESCO, 2008). In an extensive analysis of the impact of decentralisation on local financing, the 2009 Global Monitoring Report team concluded that devolution of financing can act as a powerful driver for inequity, particularly where there are weak local governance structures (UNESCO, 2008).

2.3 Instructional leaders at the middle tier can play an important role in ensuring data-driven accountability and monitoring

In high-performing systems, evaluation and accountability are integral to the success of professional learning in schools. This is because evaluation and accountability centre not only on student performance, but also on the quality of instruction and professional learning. In promising examples of reform, we often observe a strong connection between development and challenge offered to schools, with the middle tier creating a 'high support/high accountability' system.

This careful balance between accountability and support is typically underpinned by the careful use of evidence and data by professionals such as district officials, supervisors and pedagogical coaches, on student and teacher performance. Leithwood's research into high-performing districts, for example, finds that accountability conversations *are* about professional development – they are not different conversations: 'The close monitoring of progress toward improvement goals by strong districts creates an indirect but powerful means of holding staff accountable for actually applying the capacities acquired through [professional development]' (2013: 16). Jensen *et al*. argue that the distinction between, on the one hand, school and teacher

development, and on the other hand, school and teacher accountability, is a 'false dichotomy: it reflects an outdated interpretation of both development and accountability' (2016: 5). Yet, in reality the tension often remains, leading to different policy packages.

2.3.1 Using evidence and data to power instructional diagnosis and developmental feedback

In higher-performing systems and rapidly improving systems, we see evidence that middle-tier roles are explicit in the use of data and evidence to underpin developmental conversations about instructional quality. This can include the use of school performance measures and student outcomes data.

One interesting example of this in action comes from Haryana state in India, where grade-level competence has more than doubled from 40% five years ago to 88% last year (Wangchuk, 2019). The use of data by district officials, including Block Resource Persons, together with teachers and school-level staff, has been key, as explained in Box 2.4. Again, the theme of support, as well as data and accountability, is emphasised.

Looking at similar examples internationally, Naylor, Jones, and Boateng (2019) offer a useful description of how evidence-informed instructional leadership works, as part of their recommendations for strengthening the future education workforce:

'Instructional leaders (working either at the school or district level) need to be able to accurately diagnose problems, or shortcomings in current instructional practices and to prescribe high potential 'treatments' based on the best evidence available of what works. To do this effectively, they need to draw on diagnostic evidence of teacher performance (including lesson observations, learning outcomes data, evidence of learner well-being, equity, and inclusion) benchmarked against contextually relevant standards. They then need to be able to select from a range of evidence-based teaching strategies for teachers to employ to address the problem identified' (Naylor, Jones, and Boateng, 2019: 35).

A further example can be found in Ontario, where the middle-tier leaders played a vital role in assisting teachers and schools to interpret data on classroom-level learning outcomes, and apply lessons to improve their daily performance. This was accompanied by inputs with external coaches, who encouraged school personnel to work together to share practice and improve instruction. Following this intervention, sustained school-level learning improvements were reported (OECD, 2011; Mourshed, Chijioke, and Barber, 2010; Fullan and Hargreaves, 2013).

Box 2.4 Data-driven support to schools through Block Resource Persons in Haryana

In April 2018, the school education department introduced an assessment dashboard called 'Saksham Adhyapak' which monitored student learning levels. Not only does it show the performance of students across different subjects, but also marks learning outcomes and particular concepts that they struggle to understand so that teachers can address them.

Data for this dashboard is generated through standardised monthly assessment tests (MAT) in the state.

Following each exam, the teachers are required to enter data online. In addition, once every two months, government officials conduct inspections across various schools, based on a standardised academic monitoring framework. This data is also entered in the online dashboard. This dashboard, which is accessible to teachers and government officials, enables data comparisons between schools, blocks and districts.

Schools and teachers are supported by additional pedagogical resources, and by mentors called Block

Resource Persons, to put in place remedial plans to support students to meet the expected standards.

Table 2.1 below sets out Saksham Goshna round 4 results. Block level performance is shown against student grade level competency. Those blocks which achieve 80% of students reaching grade level competence, are declared 'saksham'. Disaggregated data is also available to school and teachers to use in their practice.

Box source: Adapted from Wangchuck, 2019; and The Tribune, 2018
Table source: Saksham Paper (2020 & 2021). Data for 2019-2020. https://thedarshika.com/saksham-haryana-question-papers-saksham-papers/amp/

Table 2.1 Saksham Ghoshna round 4 results

S. No.	Block	District	Grade 3		Grade 5		Grade 7	
			Hindi	Math	Hindi	Math	Hindi	Math
1	Dadri	Charkhi Dadri	92%	86%	77%	90%	93%	88%
2	Farukh Nagar	Gurugram	91%	85%	84%	93%	96%	88%
3	Gurugram	Gurugram	92%	82%	82%	88%	90%	80%
4	Bahadurgarh	Jhajjar	93%	92%	85%	96%	99%	98%
5	Rajaund	Kaithal	80%	79%	77%	91%	93%	93%
6	Karnal	Karnal	89%	89%	83%	94%	89%	76%
7	Kanina	Mahendragarh	91%	87%	83%	94%	95%	91%
8	Nangal Choudhary	Mahendragarh	91%	92%	86%	95%	96%	94%
9	Samalkha	Panipat	92%	88%	88%	96%	96%	95%
10	Nahar	Rewari	83%	84%	83%	94%	89%	76%
11	Lakhan Majra	Rohtak	92%	90%	82%	94%	97%	94%
12	Ambala 1	Ambala	81%	78%	72%	81%	92%	73%
13	Adampur	Hisar	73%	78%	74%	85%	79%	64%
14	Kaithal	Kaithal	79%	74%	68%	82%	96%	92%
15	Palwal	Palwal	68%	67%	85%	91%	95%	94%
16	Dabwali	Sirsa	80%	77%	73%	88%	92%	88%
17	Saraswati Nagar	Yamunanagar	83%	75%	72%	84%	91%	86%
18	Naraingarh	Ambala	80%	83%	57%	65%	88%	79%
19	Morni Hills	Panchkula	66%	62%	64%	62%	84%	55%
20	Loharu	Bhiwani	–	–	–	–	–	–
21	Badhra	Charkhi Dadri	–	–	–	–	–	–
22	Jhajjar	Jhajjar	–	–	–	–	–	–
23	Alewa	Jind	–	–	–	–	–	–

Saksham

Near Saksham

Results witheld

The figures in % represent percentage of students who have cleared the cut off.
i. 11 blocks are Saksham and 6 blocks are Near Saksham
ii. 8 blocks have achieved more than 90% in Class 7 Math while 14 have achieved more than 90% in Class 7 Hindi
iii. After this round, total 18 blocks across 19 districts have achieved Saksham status
iv. Results of 4 blocks have been witheld due to evidence of large scale cheating

2.3.2 Using evidence and data to set school improvement strategies

As well as using data directly with *teaching professionals*, middle-tier personnel can play a critical role in using data to support *school leaders* with wider school improvement strategies. The data may be on school or student outcomes and come via direct observation or wider analysis of locality benchmarks and performance.

Setting school improvement strategies

By using data to set improvement priorities, middle-tier agents can provide feedback and support practical recommendations for schools to change their day-to-day practices. For example, a study in Brazil, cited in the recent evidence report by Global School Leaders, has found that as part of a programme called Joven de Futuro, training for school and district leaders led to student test score increases of 0.12 and 0.09 standard deviations in mathematics and Portuguese, respectively (Barros *et al*., 2019). The programme helps school and district leaders to align their goals and use data to drive their schools' improvement planning processes.

The translation of school performance data is also a key function played by middle-tier professionals, as they can help to make it more meaningful for school leaders. For example, a systematic review of monitoring and assessment from low- and middle-income countries showed that 'desirable school-level outcomes were associated with coherent support [to school leaders] for meeting performance expectations and for translating information about performance into the everyday practices of teaching and learning' (Eddy-Spicer *et al*., 2016). In contrast, undesirable outcomes were associated with a lack of engagement with data, including the interpretation of exam and inspection results (Eddy-Spicer *et al*., 2016).

The use of data by middle-tier actors to spark action by school leaders is a recurring feature of promising reforms. There has been significant global attention to the London story of reform, which saw a rapid improvement in school outcomes and a reduction in the achievement gap for the most marginalised between the early 2000s and the mid-2010s (see Box 2.5). The data-driven support provided to school leaders at locality level (at the level of the local authority, the English equivalent to districts) has been consistently identified as a success factor (Elwick and McAleavy, 2015; McAleavy, Elwick, and Hall-Chen, 2018).

Box 2.5 The middle tier providing diagnostic feedback and support for school leaders: an example from England

One of the recurring themes that emerged throughout the investigation into the improvement of London schools was the effective use of education performance data at every level of the system. The data was used both to identify underperformance and to target support. 'I thought the way the data allowed you to pair schools...was a revelation, so I could go to a head of a school in East London and I could say: "I know you tell me you're like no-one else in Tower Hamlets, so what about this school in Hammersmith – it's got exactly the same proportion of boys there, exactly the same proportion of free school meals ... now tell me why you're not doing as well as that school?"' (Former district education official).

The most effective local authorities placed a substantial emphasis on the need to support school improvement through systematic data analysis. A recent report on the transformation of the Tower Hamlets district states that 'a particular strong feature to drive school improvement has been the emphasis put upon the collection, dissemination and analysis of assessment data.'

Source: Elwick and McAleavy (2015: 19, 53)

Building evidence and accountability for the quality of professional learning

While this data usage can provide beneficial results and help district leaders plan interventions in schools, Leithwood (2013) warns against a sole focus on student achievement results, as these cannot offer explanatory insights into the causes of student underperformance. Based on his analysis, he suggests that effective district leaders use multiple sources of data.

Zavadsky (2016) offers an excellent illustration of this in practice, in her analysis of the highly successful and often quoted reforms in Long Beach California – see Box 2.6.

Box 2.6 Monitoring progress with applied data in Long Beach, California, USA

[The district] continuously gathers multiple types of data to monitor curriculum alignment; student success; school and student intervention needs; and personnel support needs. The district assessments include end of course exams, direct writing assessments, standards portfolios, and analysis of student work. The latter form of assessment, analysis of student work, is particularly important, and surprisingly seems to have gotten lost in the monitoring strategies in many districts.

[The district]'s approach to performance management has been strong and consistent for many years...The important aspect about their progress monitoring approach is that the district values multiple measures, real-time accessible data, ongoing monitoring of classroom instruction, benchmark exams, and other measuring and monitoring systems. All data is accessible, and housed within one system to easily view numerous data sources to ensure students, educators, community members, and other relevant stakeholders have the appropriate tools and supports to meet their educational goals. The system has a history of transparency and trust, and has consistently treated data as information to identify needs, rather than as a ''gottcha''.

Source: Zavadsky (2016: 516-517)

2.3.3 A culture of evaluation and learning for long-term education strategies

In promising examples of reform, we see middle-tier professionals play a wider role than simply offering 1:1 feedback and support to schools. In many of the case studies of high impact reforms that we reviewed, the middle tier was a key part of creating a wider culture of evaluation, which drove longer-term strategies.

For example, Banerji and Chavan (2016) talk about a 'culture of evaluation and measurement' as a key factor in the at-scale success of the work they have led through Pratham. This culture has been developed through the use of student assessment data and other data at every level and by multiple stakeholders over time, to the extent that this is now expected as a cultural 'norm' beyond any individual programme run by Pratham.

Leithwood (2013) identifies the districts as playing a key role in developing such a culture in the districts he studies. His analysis associates the following district-level practices with improved student outcomes:

- Encouraging collaboration with schools and other stakeholders in the interpretation and use of data

- Building system capacity and disposition for using systematically collected data to inform as many decisions as possible

- Providing training for school leaders and staff on the use of data and research literature to sustain decision-making.

This paints an important picture of the middle tier looking across the school locality and ahead to future strategies and decisions. Other researchers have also supported this view, suggesting that a key function for an effective middle tier is the collection and use of data and feedback to inform policy and long-term education strategies (Barber and Klein, 2016; Elwick and McAleavy, 2015). This not only allows for better planning, but also provides a sense of transparency to teachers, schools, parents, or any other interested party (Parish, Baxter, and Sandals, 2012). Examples include the London Challenge, where districts placed data at the centre of their reform by focusing support on the lowest-performing schools. In the Philippines, district offices utilise data to 'prepare six-year plans that include statistical information, resource projections, and plans for teacher training and community engagement programmes' (IIEP-UNESCO, 2017: 3).

2.4 Instructional leaders at the middle tier can play an important role between state and school level, by providing instructional direction and system alignment

2.4.1 Building a shared vision

In improving systems, the middle tier can also play an important role in translating state policy by setting a local vision and direction. By communicating and cascading new information about the implementation of updated policies or curricula, middle-tier leaders can establish a common vision across all levels of an education system. As pre-service teacher development programmes only have limited capabilities to disseminate such changes (Popova, Evans, and Arancibia, 2016), middle-tier agents can play a vital role in getting all stakeholders on the same page.

Leithwood describes how this process worked in Ontario – see Box 2.7.

Box 2.7 Building a shared vision in Ontario districts

Strong districts in the Ontario study had developed a vision, mission and set of shorter-term goals that was widely endorsed by trustees, as well as by district and school-level leaders. Few members of these districts had any doubts about the importance of these directions and just about everyone had a firm understanding of what their district was attempting to accomplish. The processes through which such widespread knowledge, agreement and commitment were developed typically began in some formal goal-setting process associated with strategic planning. Two of the strong districts in the Ontario study had adopted a 'policy governance' or 'corporate' model to guide trustee work, along with a strategic planning process that was largely responsible for both the clarity of district directions and for the development and maintenance of both trustee and staff commitments to those directions. The outcomes of such direction-setting actions increased in importance among district members as steps were taken to embed the directions in annual improvement plans, monthly principals' meetings and leadership-initiated interactions in schools. The mission, vision and goals were 'brought alive' and sustained through their consistent use as decision-making tools and as beacons for the future.

Source: Leithwood (2013: 11-12)

2.4.2 Ensuring instructional coherence and alignment

Evidence suggests that the middle tier can play a critical role in a local 'instructional infrastructure' or 'instructional core'. This has been proposed by leading thinkers on at-scale instructional reform, such as Coburn and Elmore, who note the middle tier's role in 'curriculum policy frameworks, external assessment of student performance, provision of learning materials, monitoring of classroom instruction, and policy requirements for teacher education and licensure' (Fleisch, 2016: 442, referencing Cohen, 2011).

Several examples of promising practice refer to the middle tier's critical role in defining and aligning this 'instructional core', although the authority and the capacity of the middle tier to do this will depend clearly on the local system and governance arrangements. Sometimes this instructional core will be determined at national level, as we saw in the National Strategies for Literacy and Numeracy in England in the 2000s.

The importance of coherence and alignment in instructional systems is well established. One of the World Development Report's recommendations for implementing new policies suggests aligning actors to 'make the whole system work for learning' (World Bank, 2018: 23). This paper is not the place to discuss the merits of centralisation or decentralisation, but we suggest that there are interesting leadership principles and practices which may offer insights into the effective middle tier.

For example, Zavadsky (2016) describes how a clear vision and instructional goals were set by policymakers at district level in Long Beach in California, and she is explicit about the role of the district in leading the sustained improvements in student outcomes. She describes how these instructional goals were set as a core, which proved quite resilient to short-term change and new initiatives. She also explains how leaders adapted the goals to context, not coming with a blueprint, but leading a shared process with stakeholders which resulted in alignment across the district of the instructional areas.

Summary

Actors at the middle tier can play an important role as instructional leaders, directly impacting on the quality of teaching and learning. In this chapter, we have reviewed the evidence for four ways in which middle-tier roles deliver this. Evidence shows that where professionals such as pedagogical coaches or supervisors offer support for teachers' professional growth or for school-based training, this has a positive effect on instructional quality and student outcomes. They also play an important role in teacher-led collaborative professional development, offering important services such as cluster structures, expertise and external inputs to teacher networks, as well as a facilitation role.

This supportive role must be carefully balanced with oversight and accountability functions played by the middle tier. We have seen that there are positive results for students and teachers where accountability focuses on building school and teacher capacity and motivation to change. Finally, there is evidence that a strong vision – and in some cases, a strong instructional vision – at the middle tier is associated with positive student results.

Clearly, none of these results are due to the actions of middle-tier professionals alone, but we have sought to shed light on the value added by roles such as district leaders, supervisors, coaches and cluster coordinators in school system improvement.

A key theme that has emerged from the evidence is that middle-tier roles and functions have needed to shift in order to deliver new mandates, such as focusing on education quality as well as access. The evidence is taken from 'promising practices' internationally and does not represent current standard practices in many systems. An important implication is that the profile of middle-tier personnel needs to change profoundly to keep up with the evolving needs of the education system. The capacity of the middle tier is in urgent need of strengthening and, in some cases, reinvention. Yet, as will be explored in the next chapter (Chapter 3), in many contexts, their capacity to act is constrained. In addition, broader factors such as practices and mindsets must be better understood, if we are to support these professionals to flourish in bringing about teaching and learning improvement (see Chapter 4).

Chapter 3
Capacity constraints for the middle tier

The previous chapter showed the potential of the middle tier in leading teaching and learning. In reality, the capacity of middle-tier actors to impact change is often constrained. This can be in part explained by historical difficulties associated with decentralisation processes, resulting in weaknesses in the existing structures at the middle tier. It is also a result of weak systems across the workforce lifecycle, from recruitment to talent management, and of institutional norms. This chapter will review what we know about these barriers and constraints.

Beyond technical matters such as role design and strengthening workforce systems, we also note that reform at the middle tier is inherently political, as is the process of decentralisation (UNESCO, 2008). Local politics, power dynamics and patronage systems clearly play an important role in the capacity of middle-tier professionals to act and support instructional change. A discussion of these local political economies and dynamics is beyond the scope of this paper.

3.1 Weaknesses in workforce design, structure and norms

Decentralisation of school management has occurred in most countries over the last few decades and is still in process, with almost every developing country having experimented with policies in this area (IIEP-UNESCO, 2018*a*; Channa, 2015).

In the context of constant reform initiatives and decentralisation in many countries, we must question the extent to which middle-tier roles are clearly defined, understood and sufficiently resourced to successfully implement national educational policies. In this process, the institutional and organisational setup of middle-tier structures have not often evolved in line with their new responsibilities. Frequently overlooked aspects that constrain the middle tier's capacity to act include unclear mandates, inadequate staffing norms and lack of budgetary autonomy.

3.1.1 Role design

Reported shortcomings in terms of role design include a lack of job descriptions, the weight of administrative duties and compliance monitoring over support functions and instructional leadership, and confused lines of accountability.

Unclear mandates and confused lines of accountability

Although some countries have formalised job descriptions for middle-tier staff working in teacher support and development functions, job roles and responsibilities are often not clearly defined, or unavailable, resulting in overlapping and conflicting responsibilities. This can lead to difficulties in balancing support, administrative and accountability functions.

Where there is a multiplicity of structures with unclear roles, overlapping responsibilities, and a lack of coordination between different entities, this can result in or contribute to a 'professional blur'. For example, in their study of accountabilities in Delhi, India, Gibbs et al., (2019) found a significant level of overlap and uncertainty in the roles of teacher mentors and district officials.

In some locations, this can lead to several different categories or levels of staff who are designated to fulfil essentially the same role. For example, in Sri Lanka and Nepal, teacher development and support services are based at the sub-district level, with a second set of complementary support staff being drawn from the teaching force itself (Asian Development Bank, 2017; Sethunga et al., 2016). Such scenarios can cause confusion and inefficiency and lessen positive impacts on teacher support and development.

Another issue relates to blurred lines of accountability for middle-tier professionals. Following decentralisation, many district officials struggle to understand their place and lines of accountability in the education hierarchy. There are many instances in which more responsibilities have recently been assigned to local authorities, and parallel lines of authority have developed. As a result, inspection and advisory staff, as well as district education officers, may often face inconsistent or redundant requests from the MoE and Ministry of Local Government (MLG), or find themselves lacking attention, resources and support from either of these authorities (Williams, 2016; UNESCO-CFIT, 2014).

In Malawi, the role of Primary Education Advisors (PEA) provides a good illustration of such a scenario. Because their roles encompass support, inspective, administrative monitoring and community accountability, they have opaque reporting lines and actually report to multiple agencies, with different strategies and standards. However, they receive no feedback on either instruction or school improvement (Kufaine and Mtapuri. 2014; O'Neil and Cammack, 2014).

Administrative duties tend to take precedence over instructional leadership or school improvement functions

Very often, administrative duties tend to take precedence over instructional leadership or school improvement functions. In Rwanda, for example, all education matters are routed through district offices, rather than receiving school and teacher oversight, so administrative tasks at the middle tier tend to take priority over actual direct support functions (Williams, 2017). Similar issues were found in Kenya, where teacher tutors were estimated to spend only 40% of their time working with teachers, compared to 60% on administrative tasks. The pervasive impression that direct instructional support is less prestigious than administrative duties compounds the issue: tutors may in fact prefer to be assigned away from their pedagogical responsibilities (Piper and Simmons Zuilkowski, 2015: 175).

Problems sometimes arise when middle-tier role professionals are in charge of both support and monitoring or accountability roles. De Grauwe notes that the 'obligation for many supervisors to offer support and exercise control, two contrasting activities, has led to (i) an internal role conflict and (ii) regular conflict with teachers' (2007: 711). Inspectors or supervisors were, and often still are, assigned a variety of responsibilities: ensuring control of teaching quality standards; advising teachers how to improve their teaching skills and practice; monitoring school and resource management; and mediating between the central/regional and the school level.

In a number of South Asian countries, school supervisors are 'from the administrative side of education but they fulfil a joint role in that they are responsible for ensuring the smooth administration of the school...as well as for supervising teachers and supporting them to improve their performance in the classroom' (World Bank, 2010: 7). There are many examples of such overtasked district or middle-tier workers that are consequently unable to complete their primary function in an effective manner (UNICEF, 2016; Lugaz and De Grauwe, 2006; De Grauwe, 2001).

3.1.2 Staffing norms and ratios

Staffing norms and ratios are further aspects of role and structure design that are often poorly defined. In some cases, official decrees describe the responsibility of the departments and units, but these documents (some of which are outdated) do not provide any indication on the number of posts necessary to implement the mandate. In terms of teacher support and development, this can result in inappropriate caseloads and inadequate ratios of supervisors to teachers. Moreover, an absence of official staffing norms can lead to geographical disparities in the distribution of district and/or provincial education officers and teacher inspection/advisory staff, as noted in several institutional capacity analyses carried out by IIEP-UNESCO, such as those concerning Haiti and Chad (IIEP-UNESCO Pôle de Dakar, 2016; IIEP-UNESCO, 2018b). Another study conducted by IIEP-UNESCO in Benin revealed huge variations in staffing between district offices: of two districts in charge of managing approximately the same number of teachers, one had twice the number of staff as the other (De Grauwe, 2009).

3.1.3 Material and financial conditions: lack of budgetary autonomy

Middle-tier structures are often underfunded or understaffed, as they do not always get the same attention as some other entities within the system. This is a major limitation to the extent to which they can fulfil their role. Further, many district-level offices have little autonomy over their budgets and are not able to delineate money for their own purposes. Instead, they may simply receive money for earmarked purposes from the central authority, based on factors like number of schools or pupils (Barasa, 2014).

'It is unpalatable and awkward that on one hand, the district education manager is supposed to provide schools with resources but on the other hand, he has no authority over acquisition of such resources. This situation makes work difficult because the district education manager is denied the responsibility to supply what districts regard as key school priority needs to ensure quality education' (On Malawi district office responsibilities, in Kufaine and Mtapuri, 2014: 769).

IIEP-UNESCO (2017) found that many districts struggled to match resources to local strategies and priorities without control of their own budget. In Kenya, for example, the central ministry allocates district funds, but the individual needs of districts are not necessarily taken into account. This includes such things as increased training for inexperienced staff or additional fuel costs for travel to schools in more rural districts (Barasa, 2014). This also occurred in Pakistan, where 'total sums received from central government were so small that DEOs were unable to make spending decisions based on their needs' (IIEP-UNESCO, 2017: 5). Decentralisation in Malawi has led to district offices gaining many responsibilities, but they still lack the ability to acquire and distribute resources as they see fit. This has led district officials to complain they cannot properly support improved teaching and learning outcomes (Kufaine and Mtapuri, 2014).

Due to a lack of resources for travel, rural districts often find themselves unable to provide adequately consistent support and site visits to teachers. Even when they do get to schools, follow-up visits or communication then prove infrequent. This was observed in Zimbabwe, where district officials only visited rural schools every four years, in comparison to the country average of every two-and-a-half years (Education Commission, 2019). In Uganda, the needs of schools and teachers overwhelmed the district's insufficient transportation budget, and middle-tier staff began only visiting schools that reported significant problems (Kayabwe, 2014). In Lesotho, district personnel often lacked access to vehicles and drivers, and even had to hire horses to reach some of

the most rural schools. Most cited these troubles as one of their biggest limiting factors (Lefoka and Tsepa, 2014). Similar rural transportation issues were reported in Lao PDR (UNICEF, 2016) and Kenya (Barasa, 2014; Piper and Simmons Zuilkowski, 2015).

Financing issues are not limited to low-income systems, however, as several higher income countries also face budgetary issues for middle-tier personnel and programmes. For instance, due to budget restrictions in England, many Local Authorities are limiting their functions (Ofsted, 2020). In Scotland, the Chartered Teacher programme was taken on by Local Authorities to improve teacher quality through a system of professional development. However, high costs were one of the major factors leading to the programme's discontinuation (Crehan, 2019).

3.2 Shortcomings in the workforce lifecycle

In many places, decentralisation processes have increased the importance and responsibilities of the middle tier, but middle-tier professionals are often not in a position to fulfil their newly assigned roles. Weaknesses in the organisational setup can be compounded by shortcomings at the level of individual postholders. Such weaknesses are reflected throughout the workforce's lifecycle, from recruitment to additional training and career prospects.

3.2.1 Recruitment

There are three main issues related to the recruitment of middle-tier personnel in charge of teacher support and development: a frequent lack of clear qualification requirements, difficulties in recruiting sufficient numbers of skilled and trained staff, and problems associated with the recruitment process.

Recruitment criteria
Institutional capacity analyses carried out by IIEP-UNESCO[2] show that in many developing countries, there are no specific stipulated qualification requirements for staff operating at the district and sub-district levels of the education sector. In general, these personnel are former secondary school teachers without any specific training for the managerial, supervisory or advisory functions they are expected to fulfil. Staff members are often hired for these positions based on their years of service. The exception is for school inspectors, pedagogical advisors, and teacher trainers at tertiary level: at a minimum, qualification requirements for these roles are clearly set.

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[2] See in particular: De Grauwe and Segniagbeto's (2009) *Transformer la planification et gestion de l'éducation au Bénin par le renforcement des capacités* and IIEP-UNESCO's (2018*b*) *Diagnostic des capacités de planification du système éducatif haïtien.*

Recruitment process

There are also problems associated with the process of recruitment. Recruitment processes for middle-tier roles often fail to include an advertisement of a post with precise terms of reference, followed by identification of candidates with the right profile and selection via an interview or test. A study in Benin found rather the opposite, with teachers being appointed to administrative posts following a formal or informal request (for personal or health reasons) to a relevant office. Such appointments were often made without assigning any specific post description, and usually without discussion of relevant tasks with the relevant Director or Chief. The survey, conducted with some 50 administrative agents at central and decentralised levels, confirmed that at least 83% of those interviewed had followed this kind of procedure, and that only 17% had undergone a selection process before being appointed to their post (De Grauwe, 2009).

Difficulty in recruiting qualified and trained personnel

Where formal recruitment criteria do exist, they are not always fulfilled, and the qualification and training backgrounds of teacher support and development staff are rather diverse. For example, a UNICEF study found that in Lao PDR, only 50% of Pedagogical Advisors were reported to be trained for their job, while a significant (albeit unspecified) proportion of these workers do not fulfil other selection criteria for their roles. The study highlighted that the lack of required qualification levels or specific training for the assigned teacher development functions can jeopardise the actual effectiveness of these staff: 'Pedagogical Advisors who do not have (specific) formal training and certification are perceived by teachers as 'merely another classroom teacher' and so are not given much status as visitors. Nor are they consulted by teachers on curriculum matters, new teaching methods or assessment of learning outcomes as often as they might if they were formally trained' (UNICEF, 2016: 25).

In some parts of the world, especially in Asia, education officers at district and sub-district levels have an administrative professional background and training, rather than a pedagogical one. This may have advantages with regard to their managerial tasks, but in some cases, it draws their preparedness for teacher development and support functions into question (as these involve subject matter knowledge, pedagogy and didactics). In a number of South Asian countries, for example, school supervisors are 'from the administrative side of education but they fulfil a joint role in that they are responsible for ensuring the smooth administration of the school…as well as for supervising teachers and supporting them to improve their performance in the classroom. The fact that many of the supervisors from the administrative service have no

classroom experience brings the extent to which they can actually fulfil the teacher support role into question' (World Bank, 2010: 3).

Sometimes, district offices simply cannot find any qualified candidates to effectively take on the functions assigned. For example, decentralisation efforts in Indonesia found many districts struggling to take on assigned extra responsibilities due to low levels of capacity in local settings (SEAMEO, 2012).

3.2.2 Training

The effectiveness of the organisational unit (for example, a district office) depends on the profiles and the performance of individual officers. Their effectiveness in turn depends on the combination of qualifications, experience and training, and on the relevance of this combination to their mandate and tasks. Individual postholders require specific technical skills or management skills to fulfil their tasks, and each individual should be aware of the specific task he or she is required to perform and of the skills he or she needs. The availability of professional development activities plays an important role in ensuring the match between profiles and tasks of individual staff members. Yet, training is often not available or adequate at the middle-tier level.

Absence of pre-service training

The literature reveals that middle-tier personnel often lack the capacity to fulfil their function, primarily due to a lack of background training and adequate qualifications. In many countries, the evidence indicates that while the majority of middle-tier staff in charge of teacher support and development have decent levels of formal education, they often lack specific professional training for their role in teacher development. With the exception of inspectors, and sometimes pedagogical advisors, there is no specific professional training for teacher development and support functions in many developing countries.

Lack or irrelevance of in-service training

Few in-service training opportunities exist for new employees taking on new functions. In the case of teacher development staff, further training and career development opportunities are also reported to be rare or ad hoc. In Lao PDR, pedagogical advisors receive only irregular training, with six of the 18 advisors interviewed by UNICEF receiving no initial training despite having served in the pedagogical adviser role for three years or longer (2016: 23). Others have served in the role for 12 years or longer without receiving any type of refresher training (UNICEF, 2016: 25). Information on district staff training in Kenya was scarce, but evidence collected by Barasa (2014) indicated that most district staff had not received training for long periods of time. Some interviewees also indicated that middle-tier

professionals had to fund their own training programmes, many of which are only offered by NGOs (Barasa, 2014: 22). In addition, in an analysis of teacher training in low- and middle-income countries, the majority (73%) of in-service teacher training was provided by researchers or non-governmental organisations (Popova, Evans, and Arancibia, 2016). This restricts the curriculum areas in which teachers receive training to a few priority areas, such as literacy and numeracy.

The availability of professional development activities plays an important role in ensuring the match between profiles and tasks of individual staff members. If middle-tier staff are not correctly trained or qualified, the effect on their performance or efficacy can be detrimental.

Through a review of numerous case studies focusing on school inspectors, Ehren *et al*. (2017) highlighted that most middle-tier monitoring or inspection teams completely lacked training and human resource management. They found further issues regarding pay, as many head teachers made more money than their inspectors, which caused 'head teachers to believe that inspectors are not of a high status and that their feedback can be disregarded' (Ehren *et al*., 2017: 8).

The effectiveness of teacher development activities is also reported to be sometimes hampered by the absence or inappropriateness of guidance materials for both teacher development staff and teachers. In Cambodia, for example, a lack of official guiding materials in some districts causes ambiguity and confusion over what middle-tier functions actually involve (Kelsall *et al*., 2016).

3.2.3 Career progression

The lack of career progression prospects can also affect the stability of the middle-tier workforce. In Lao PDR and Kenya, district support staff have high rates of turnover, often due to a lack of clear career progression or professional development (UNICEF, 2016; Piper and Simmons Zuilkowski, 2015). Moreover, Barber, Whelan and Clark note that, 'developing the pipeline of talent for middle-tier leadership is also a challenge. The identification of potential middle-tier leaders does not, in general, appear to have reached the same level of consistency and sophistication as the identification of potential school leaders' (2010: 25). They point out examples of developing future middle-tier leaders in high-performing districts in England and Alberta, but examples of such foresight to middle-level career progression proves the exception rather than the rule. Nonetheless, the identification of middle-tier leaders may be facilitated in future by the growing interest in widening the opportunities available to teachers which allow teachers to move to specialised pathways and career ladders (Tournier and Chimier, 2020).

'In an age of accountability, we need peer support for teachers who are getting all this feedback about how they're doing in their classroom…and we need options for those who have been made aware that they are doing well in their practice and want more career opportunities' (Senior official with the Department of Education in New York City, Crehan, Tournier, and Chimier 2019: 18).

3.3 Institutional norms

Institutional norms can also influence the 'degree of commitment amongst officials, their propensity to engage in collective behaviour and their interpretation of the tasks given to them to fulfil their organisational mission'. (Mehta and Walton, 2014). For example, evidence from Cambodia suggests that middle-tier personnel did not fully engage in recent reform efforts because they felt disengaged from teachers and saw little personal reward for trying to make large cultural changes in schools (Kelsall *et al*., 2016).

Consideration of middle-tier professionals' sense of agency and their ownership of reforms can act as a counterweight to some wider challenges touched, such as accountability, disengagement with reform efforts, compounded by poor extrinsic motivational factors such as pay and allowances. Institutional cultures can limit staff ability to deliver in a number of ways, such as limiting their ability to take initiative. For example, in Malawi, when PEAs were given more responsibilities as part of decentralisation, the work culture and hierarchy tended to limit staff ability to take the local decisions needed to implement the changes (Kufaine and Mtapuri. 2014). In Bihar, normal ways of working offer staff few avenues to raise their own concerns: researchers found Block Education Officers frequently referred to their roles as 'post offices', doing the bidding of those officers above them in the hierarchy, without the transfer of authority or space to take decisions based on local circumstances (Aiyar and Bhattacharaya, 2016)

Summary

Constraints at the middle tier are important to take into consideration when analysing the potential for reform and capacity to transform teaching and learning. These issues are enduring in many systems and not easy to address. However, as the next chapter will show, when due attention is paid to lifting these barriers and innovative strategies are put in place to strengthen middle-tier roles and workforce systems, the pace of change is increased. Chapter 4 will seek to highlight what little we know from promising initiatives at that level and how they have been successful in strengthening middle-tier professionals' capacity as agents of change.

Chapter 4
Reviving instructional leaders at the middle tier as a nexus for change

This chapter considers recent evidence and new trends in instructional leadership roles at the middle tier. Building on the core functions identified in Chapter 2, we identify innovative practices which are still to be supported by more conclusive evidence. The chapter includes cases where instructional leadership roles have been given new impetus within education systems and considers what it took to change attitudes, and how constraints were lifted.

We draw on a small literature around innovation at the middle tier to suggest new directions and shifts in how middle-tier actors can become change agents to transform teaching and learning outcomes, and overcome some of the challenges and barriers described in Chapter 3. The emerging themes offer a potential future research agenda on how the middle tier can play a part in more transformational and sustainable change for school systems.

4.1 Instructional leaders as change agents

In this section, we look at how middle-tier leaders can act as agents of change, shifting institutional norms which may be inhibiting teaching and learning improvement. We consider how this might involve changes to the ways in which middle-tier professionals see their roles, helping to transform them from individuals who are somewhat passive and disengaged from a wider reform effort, to professionals who see themselves as change agents key to the implementation and success of reform.

As De Grauwe argues, 'it is a lot easier to change structures and terminology than to transform ingrained cultures and

traditions' (2009: 7). The remainder of this section suggests some ways in which education systems can begin to do this.

4.1.1 From a delivery mindset to an improvement mindset

A promising shift we have seen in some examples of recent reforms is a change in the mindset of middle-tier professionals, and the active role they are playing in motivating teachers to improve their instruction. For instance, in Delhi, reforms have been powered at a local level by new middle-tier actors playing an instructional leadership role (see Box 4.1). Teacher development co-ordinators (TDCs) and mentor teachers (MTs) are charged with building a vision in Delhi's schools of teachers as professionals with a moral imperative to take charge of their professional development and transform student outcomes (Gibbs *et al.*, 2019).

This is a good example of where the middle tier can play a role in shifting mindsets and in motivating teachers, something which Rorrer, Skrla, and Scheurich (2008) reflect on in their analysis of instructional leadership at the middle tier:

'Despite the general lack of agreement on exactly what constitutes instructional leadership at the district level, two elements of it appear consistently in the research and are frequently cited as being essential: generating will and building capacity' (Rorrer, Skrla, and Scheurich, 2008: 315).

4.1.2 From administrators to builders of collective professional efficacy

In Chapter 2, we discussed the role of middle-tier actors in supporting collaborative teacher professional development. In some systems, we have seen this embed and develop further, where there is an explicit attempt to nurture more collaborative professional working practices between middle-tier professionals themselves, as a key strategy to build professional capacity.

One way of developing these collaborative and open practices is through the development of flatter management structures in which middle-tier professionals have space to present, discuss and act on the concerns and challenges they face in implementing education reform. As Leithwood (2010) described in the context of high-performing school districts in Ontario, developing this way of working can develop and institutionalise new beliefs and values.

'Communication in high-performing districts is fostered by a perception of 'flatness' in the district. Principals and teachers feel socially and organisationally close to those working in the central office, a perception that encourages fluid horizontal and vertical communication. Shared beliefs, values, and purpose are both stimulants for, and the result of, such communication' (Leithwood, 2010: 260).

A good example of such a shift in attitudes – from a scenario in which middle-tier actors viewed themselves as passive, powerless agents of delivery within an extremely hierarchical bureaucracy (the 'post offices' described in Chapter 3), to one in which they were problem-solving agents of change – comes from reforms in Bihar, as a result of shifts in leadership and power dynamics (see Box 4.2).

Developing individual leadership capacity at district level may be necessary, but it is not sufficient for educational change. In a comprehensive analysis of capacity building and training for national and district-level education

Box 4.1 Changing mindsets in Delhi

The scale-up of STiR India's programme is designed to ignite the intrinsic motivation of teachers in Delhi. It is one example of how changing workplace norms can increase the effectiveness of new or redesigned middle-tier roles. Here, the development of new collaborative working practices that encouraged a culture of open reflection between middle-tier professionals and teachers, and between teachers within schools themselves, had a positive effect on the implementation of reform and created a significant change in the way of working.

Working with Delhi education officials, STiR developed the two new types of middle-tier roles as school-facing roles to set up and deliver 1,000 new 'teacher networks' in schools. These networks are the primary means of engaging teachers in professional development. The roles were designed to enable

the holders to act as change agents – to deliver culture change at scale – and to be owned and led by the Delhi education system. The school-based TDCs would support the day-to-day delivery of teacher networks, and the MTs were recruited to oversee the programme across a cluster of schools.

The new postholders are teachers' peers – usually appointed directly from teaching roles, with consideration of their track record in peer learning and teaching practice improvement. MTs and TDCs were not left to run the teacher networks alone, but STiR and the Delhi system developed monthly progress check meetings in which they were able to share success stories, and discuss challenges and data. There were also discussions focused on the education literature to develop their skills and understanding, as well as training to using data to enable them to provide more effective support.

Education Development Trust worked with STiR as a learning partner and found that effective TDCs and MTs had developed a strong attitude of accountability. They had a sense of ownership of the programme, including a sense of accountability to colleagues and for the success of teaching in the school. The development of a culture of trust and openness also constitutes a significant shift in ways of working – and this change in culture has important positive impacts on improving teaching. One TDC explained: 'As a teacher, I was only concerned with myself. Apart from me, only one or two other teachers, like those who had lunch with me, would share their experiences [...] and discuss lessons. As TDC now, I am talking to other subject teachers also, as to what they can do to improve the teaching-learning process' (Gibbs *et al.*, 2019: 24).

Source: Adapted from Gibbs *et al.* (2019)

Box 4.2 Building collective professional capacity in Bihar

Aiyar and Bhattacharya (2016) looked at the role of the district-level staff in the implementation of a 2013-2014 Pratham programme, which introduced 'Teaching at the Right Level'-style pedagogy as part of 'Mission Gunvatta,' an education sector reform effort to improve standards in primary education.

Cluster Resource Centre Coordinators (CRCCs) had a significant role in supporting schools and teachers to make the changes. The programme benefited from strong leadership and engagement from District Managers, and CRCCs were able to access ongoing mentorship and training, including regular onsite support, which increased their skills and confidence. District Managers created new spaces for dialogue and problem-solving with the CRCCs, which shifted power dynamics and increased CRCCs commitment to the programme. One CRCC explained: 'We had direct access to the DM. We directly raised the issues we saw in the school with the DM. The DM would then instruct his officers (our seniors) to buckle up and take action. He was listening to us instead of the officers more than anything else. With the DM's backing, we (CRCCs) felt extremely empowered' (Aiyar, Dongre, and Davis, 2015: 34).

In this case, the CRCCs could see the impact of their collective efforts on action being taken in schools, and there was a positive feedback on their sense of professional efficacy.

CRCCs were actively engaged and supportive of the programme due to subtle shifts in leadership and power dynamics, which enabled them to shift from a passive and powerless conceptualisation of their role to a view of themselves as problem-solving, impactful change agents.

Sources: Aiyar, Dongre, and Davis (2015); Aiyar and Bhattacharya (2016)

professionals, De Grauwe (2009) highlights that a key failing of traditional technical assistance has been a lack of focus on building collective capabilities. Well-designed peer learning can be transformational in this sense because, in addition to being effective at the individual level, it plays a critical role in building collective leadership capabilities to deliver educational change. Leithwood (2013), citing a study by Lee *et al.* (2012) across 45 US districts in nine states, explains that strong district conditions and leadership together explained about 19% of the variation in student achievement across districts, where districts are effective at developing a sense of collective efficacy among school leaders about their work.

The broader literature on collective efficacy also supports this as a promising new practice and culture worthy of attention. Most of the educational research in this area has been undertaken by Jenni Donohoo, John Hattie and Rachel Eells at teacher level, who find that collective teacher efficacy is a strong determinant of student outcomes (Donohoo, Hattie, and Eells, 2018). Just like the example in Bihar, Hattie and colleagues find that leaders can build collective efficacy through a relentless focus on evidence of impact. Teachers grow in the feelings of efficacy when they work collectively to solve problems and then witness their shared success. Fullan and Hargreaves also talk about the importance of building professional capital and collective capacity as part of efforts to professionalise the education workforce (Fullan and Hargreaves, 2013).

4.1.3 From top-down professional development to peer learning partnerships

A further interesting innovation is the 'stepping up' of teachers into instructional leadership functions traditionally delivered by middle-tier functions. They act as expert practitioners or 'system leaders' to share their expertise (as peers) with other professionals, including those outside their own school.

It has been observed that teachers can show significant resistance to this kind of peer-coaching as a means of delivering professional development activities, partly because it calls established traditions of hierarchy in training processes into question (Kelsall *et al.*, 2016). However, it is also partly due to preferences for learning from better-trained and more experienced 'real professionals', rather than from 'peers' (Bill & Melinda Gates Foundation, 2014). Developing and building learning partnerships based on strong professional relationships between peers can take time – and requires the development of trust.

We see this in an example of teacher reform from New York. The Teacher Career Pathways (TCP) programme provides opportunities for teachers to continually build and develop their professional practice and develop leadership.

This involved the creation of Teacher Team Leaders (TTLs) – a small number of experienced teachers recruited into full-time support roles in which they acted as coaches and mentors to other teachers (Crehan, Tournier, and Chimier, 2019).

TTLs were not involved in any formal evaluation of the teacher leaders that they supported, but still it took some time for teachers to trust the new ways to working. One teacher leader commented: 'It is something that takes a couple of years to marinate and clarify and become distilled within the staff: it definitely didn't happen in the first year.' This collaborative approach constituted a shift from the judgemental observations that teachers were used to and required teachers to be open about the challenges they were facing and actively seek solutions. One TTL explained: 'You want to build trust in a relationship. People are opening up the doors for you. You cannot trust when you don't know where the information is going. We give them our notes.' (Crehan, Tournier, and Chimier, 2019).

Fascinating recent analysis from Popova, Evans, and Arancibia (2016) demonstrates why we should pay close attention to such examples and to 'expert practitioner' or system leader roles. Their extensive impact analysis of teacher training in low- and middle-income countries found that the profile of teacher trainers was important: in a regression analysis of training delivery factors affecting student outcomes, they found that 'using researchers or local government officials – as opposed to education practitioners of some sort – as the trainers in direct contact with teachers [is] associated with 0.20 and 0.17 standard deviation lower program impacts on student test scores, respectively' (Popova, Evans, and Arancibia, 2016).

4.2 Using professional skills and competency frameworks to underpin middle-tier recruitment and development

The collaborative learning and system leadership innovations described above serve teacher outcomes well. But, at the same time, they are also inherently capacity-building

mechanisms for middle-tier roles. This section looks more closely at innovative approaches to capacity building for instructional leaders at the middle tier. We know that effective teacher professional development requires teachers to reflect on their practice by discussing teaching and learning issues with colleagues (McAleavy, Elwick, and Hall-Chen, 2018; Darling-Hammond *et al.*, 2017; Cordingley *et al.*, 2015; Timperley *et al.*, 2008; Mewborn, 2003), and the same is true for middle-tier instructional leaders. Well-designed professional development programmes can support the development of strong on-the-job leadership practices, skills and competencies, which supports long-term change. Mechanisms for this include mentoring or coaching, and formal leadership qualifications can be structured to include on-the-job and workplace-based learning.

'High impact professional development is not just about gaining new skills and knowledge, it is about building capacity to improve education practice and outcomes. Professional development should therefore be seen as a driver for quality improvement and for motivating the education workforce to take action, rather than as an input into an education system. Policymakers should pay attention to the processes and mechanisms which underpin professional learning and practice change, as well as the content' (Naylor, Jones, and Boateng, 2019: 22).

The Ontario Leadership Framework (see Table 4.1) is one example of the development of an evidence-based set of skills and resources required by leaders, and underlines effective leadership at the school and system level.

The framework conceptualises school leaders as an integral part of an education system and, as such, aligns with other direction-setting policies Research focused around strong and effective school districts in Ontario found that in addition to the skills and qualities in the OLF illustrated above, strong leaders at the district level demonstrate two additional 'personal leadership resources:' proactivity (a psychological resource) and systems thinking (a cognitive resource). The importance of both of these qualities rests in the need for district-level leaders to effectively manage large-scale

Table 4.1 Personal leadership resources as described in the Ontario Leadership Framework (OLF)		
Cognitive resources	**Social resources**	**Psychological resources**
Problem-solving expertise	Perceived emotions	Optimism
Domain-specific knowledge	Managing emotions	Self-efficiency
	Acting in emotionally appropriate ways	Resilience

Source: Adapted from Leithwood (2013).

change in complex organisations, while maintaining a focus on improvement efforts and increasing collective capacity. This reflects the different relationships that district leaders have with community groups, parents and the central education ministry.

Recent reforms in Wales offer an innovative example of a case where middle-tier leadership reforms have been fully underpinned by a skills and competency framework. Professional development support for middle-tier leaders was developed as part of a broader reform programme, and was directly designed to support school leadership quality improvement. The Welsh government developed a 'National Mission' for large-scale school improvement reform, which included the development of leadership throughout the system, alongside a focus on collaborative ways of working. Part of the response was the foundation of a new middle-tier agency: the National Academy for Education Leadership (NAEL), which has the overall aim of bringing clarity and coherence to educational leadership in Wales (Welsh Government, 2017).

NAEL's flagship programme is the Academy Associates Programme. This professional development programme, developed with the support of Education Development Trust, is for outstanding head teachers to develop them into school-based system leaders. Successful applicants undertake a three-year programme of professional development that includes seminars with education leaders, communities of practice, 1:1 coaching and a research-based policy-relevant commission project. The programme is designed so that as participants grow in confidence, they act as ambassadors, advocates and representatives of the Academy, drive higher expectations of leadership in schools and other middle-tier institutions in Wales and support the implementation of Wales' new curriculum. Forthcoming research shows that the accomplishment of these goals is becoming evident in increased ownership of curriculum reform in schools and improved avenues for the voice of the teaching profession to be heard (NAEL, 2020).

4.3 Continuous improvement and system-wide learning

We described in Chapter 2 how middle-tier instructional leaders can make good use of data to inform school and teacher feedback in improving systems. In this section, we take this further, looking at innovations where the middle tier is supporting a 'learning system' by leading cycles of improvement, and by helping to scale good practices.

4.3.1 Cycles of improvement

Instructional leaders at the middle tier can assist teachers and schools in using and interpreting data and evidence as a way of building efficacy (Donohoo, Hattie, and Eells, 2018)

and developing a culture of decision-making based on real knowledge about local conditions. Data can be used to pinpoint and measure school improvement priorities, but the development of strong participatory data collection systems can also enhance peer learning and discussion between middle-tier professionals who are engaged in learning, problem-solving and developing good practice.

In Ontario, Leithwood described how instructional leaders can support teachers and heads to use and interpret data from a range of sources, apply lessons to their daily performance, target resources and inform planning, and design cycles of improvement. He describes the development of a culture which uses data and evidence to inform decision-making at every level, combining top-down demand with the use of a range of data and evidence in schools. High-performing district principals and school boards made use of a broader range of data in the development of school improvement plans and are then more able to identify and be responsive to the needs of individual students. Principals were encouraged to share their practices with schools experiencing less success as a means of building capacity (Leithwood, 2013).

Jensen *et al*. (2016) describe how increasing the collection and use of data beyond test scores represents a profound shift in a system – showing faith and trust in workers to make professional judgements. For example, in Shanghai, where evaluation and accountability rely on the professional judgments of district leaders, leaders' accountability focus is on the quality of professional learning, rather than student outcomes:

'In Shanghai, evaluation and accountability regularly relies on the professional judgments of district leaders. The leaders are expected to know their schools, their strengths and weaknesses, and the quality of professional learning. The leaders are therefore expected to exercise their professional judgment on a regular basis and have been promoted to that position because they are good at doing so. The district leader is held accountable for both the performance of their district and the quality of professional learning in the district. Among other things, their 360-degree performance evaluation stretches across different levels of the system. So, the system builds in a relationship of trust that supports accountability between levels of the system' (Jensen *et al.*, 2016: 19).

In the longer term, leaders holding open conversation about what the data shows enables them to progress and identify areas for further improvement: this ultimately becomes a cycle of improvement and real commitment to change, which engages actors from across the system (Donohoo, Hattie, and Eells, 2018). This is reflective of De Grauwe's (2009) analysis:

'Such a cycle starts with the selection of the schools and teachers in function of their needs, a profound examination of the school's or teachers' profile and a helpful visit. This leads to a pertinent report which is distributed to several actors who can take action including the school itself, the supervision service, the central administration and teacher training colleges. Their action leads to improvement within the school and in the education system as a whole. This ideal scenario however is the exception in both developed and developing countries' (De Grauwe, 2009: 2).

4.3.2 Scaling innovations and local system learning

In many ways, middle-tier professionals are in a unique and privileged position to support school reform, having a district or locality-wide view of both high-impact practice and key bottlenecks in school improvement. Together with other officials at school and state level, we see renewed evidence that the middle tier can be system-leading by scaling effective school practices, as well as systematically trialling new innovations.

By working with schools in an entire district or region, middle-tier leaders have a unique perspective from which to innovate new ideas or programmes – and to identify the 'bright spots' which could be shared and scaled so all teachers can benefit. In Canada, for example, a group of respected middle-tier leaders were instrumental in all phases of a successful new special education programme. A key part of their work was trialling and experimenting with new practices and folding back the learning into the programme. They 'did not just deliver but also developed much of the reform strategy that included processes of coaching, mentoring, cross-pollination and communication of key ideas – especially during the "back and forth" process of project applications. They led from the middle' (Hargreaves and Braun, 2010: 97).

In another example, in the reforms in Haryana (see Box 2.4 for background), good governance associates embedded at district level play an explicit role in encouraging the cross-fertilisation of innovations across districts. This goes beyond good practice exchange: in a recent example of the work of these associates, 26 successful blocks were identified from which learnings were codified. These were then shared with officials at a workshop with 11 districts to draw out cross-learnings. Officials were expected to take the learnings forward over the next two months and their performance was monitored as part of the wider programme (Wangchuk, 2019).

Zavadsky (2016) describes a different mechanism for scaling effective practices in Long Beach, California.

Rather than centralised sessions to explore practices, district leaders build on the existing visits conducted by coaches, where 'problems of practice' are explored in a live classroom setting and discussed. She describes an explicit effort to scale best practices observed during these visits: 'the district ensures central office leaders who supervise principals participate in the visits (alongside coaches), so that they can share effective practices across schools.'

In an interesting example from Vietnam, McAleavy, Thai Ha, and Fitzpatrick describe how the middle tier gathers intelligence on 'what's working' as a key part of their role. They describe how:

'Officials are expected to explain policy to schools and provide both support and monitoring to ensure fidelity of implementation. According to the regulations, the process is two-way...being simultaneously both 'top-down' and 'bottom-up'' (McAleavy, Thai Ha, and Fitzpatrick, 2018: 19).

This allows middle-tier managers to take centre stage in a feedback loop which provides a smooth flow of information both up and down the administrative chain. Through this, teachers can remain engaged with an education system's overall vision and better align themselves to shared goals and expected outcomes.

4.4 Future directions and an agenda for research

Gaps remain in the literature about understanding high-functioning middle-tier profiles, functions, behaviours and practices. This corroborates an analysis from FCDO's RISE programme, which stresses an urgent need to understand the delivery of reforms and calls for more research attention to *de facto* practices and implementation approaches. Questions from this analysis arise, such as 'what do role-holders actually do?', 'which practices actually make a difference and why?', and 'what really gets in the way of effective implementation on the ground?' (Pritchett, 2018).

In particular, there are significant gaps in the literature around best practices and implementation methods. Very little literature directly addresses the impact of the middle tier in teaching and learning, or how roles can be designed to incorporate, value and develop the skills and competencies that we have identified as essential for effective practice. Very little literature sets out to understand how the middle tier can be effectively managed within decentralised education systems and at the district level, or how communities engage with or support reform efforts driven by the middle tier.

In addition, further research is required into the interaction between the system/institution and individuals, to forge an understanding of how institutions implement and support change, and of how this interacts with middle-tier professionals' performance.

We have seen how successful reforms are often associated with changes in day-to-day professional practices, which are far harder to accomplish than learning new skills. Recent research suggests that reforms often fail because they pay too much attention to 'technical' solutions, without building the wider human capacity which ensures that change embeds and endures – such as mindset shifts, culture change or political buy-in (Naylor, Jones, and Boateng, 2019) – which in turn support the changes in practices and behaviours that lead to improved teaching and learning. Wider thinking from organisation design and management science has long drawn similar conclusions: that we must understand more than technical skills if we are to understand the drivers of workforce performance.

Drawing on work around adult learning theory and capacity building, we should investigate ways in which effective programmes and reforms might support individual change and improved working practices within existing structures (as in Kufaine and Mtapuri's (2014) case study of positive change in working practices, with support focused on the postholders' mindset. Levy (2014) suggests that even the most hostile of governance settings can foster 'islands of effectiveness' which can help drive reforms.

We might consider that a broad base of actors with strong competencies can lead to sustained change as a critical mass of change agents (Jones *et al.*, 2019; Leithwood, 2013). The review suggests that middle-tier professionals face many challenges which originate with the design and resourcing of roles. A combination of analytical approaches could be usefully made to explore how and why these structures of systems function and what is it that holds them into place. Further exploration and research into the functions of support mechanisms in highly functioning middle-tier systems could fill in some of these gaps.

Further gaps emerge in communication and cascading policy implementation. While communication up and down the chain seems a vital function for the middle tier, literature does not explain how the communication flows. Factors such as perception of open communication regarding administrative hierarchy and formalised reporting procedures in high-functioning middle tiers are yet to be analysed.

Summary

Chapter 2 demonstrated how middle-tier roles can be lynchpins in education reform. As Fullan suggests, the middle tier can 'develop greater system coherence' by strengthening the integration of larger system goals to local needs and situations (Fullan, 2015: 24). The examples of promising practice in this chapter are at least in part reliant on the development of flat, fluid, open and honest communication (Leithwood, 2010), which allows both the cascading of information down and learning from the bottom-up. Where this is effective, we can begin to see action and ownership at the middle tier. We suggest that this kind of professional capital and these ways of working have clear benefits for instructional quality, as well as for the sustainability of reforms.

The case studies in this chapter also illustrate the complexity of reform – they involve multiple avenues of change and are most effective when tackling more than one of the barriers we discussed in Chapter 3 at once. Tackling material resource constraints alone is not enough to improve performance of district-level education officials, but where officials are supported to understand their changing roles, and develop a sense of efficacy and skills to support others, they can be effective instructional leaders. As Ehren *et al.* (2017) have suggested: 'There is no single function that on its own can drive improvement, the mechanisms that drive improvement are inter-related and cannot be separated when explaining how improvement is achieved' (Ehren *et al.*, 2017: 480).

The renewed interest in the role of the middle tier in education system reforms has paved the way for research that sheds light on innovative practices that improve their various functions. There is scope to understand subject matter such as the need for and implementation of training for better leadership and dynamics of communication pathways with regard to policy implementation. Middle-tier leaders are in unique positions to develop an overarching view of district-level functioning of education systems, which can be used to inform and improve other actors working towards better teaching and learning.

Looking ahead
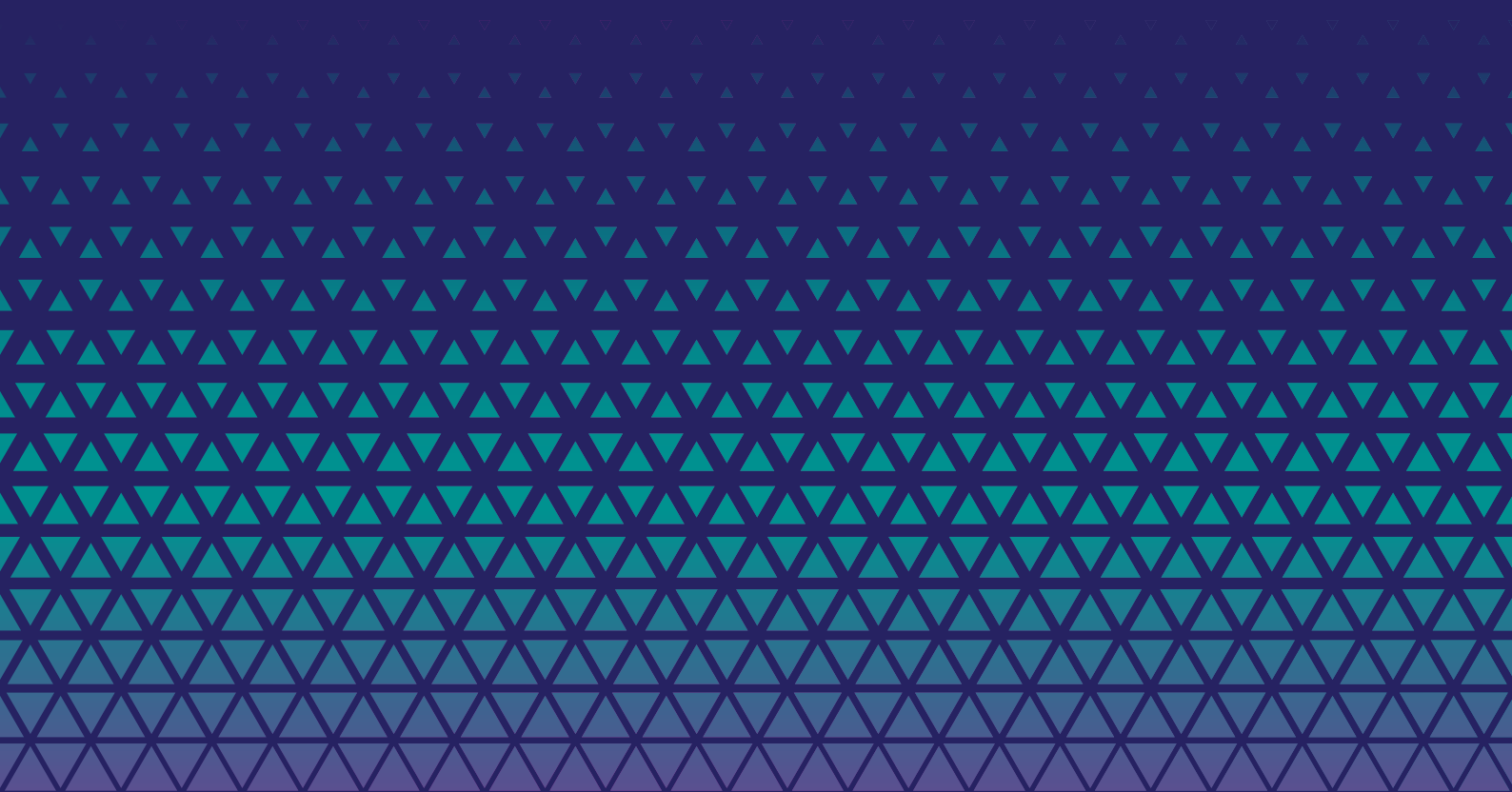
Throughout this paper, we have seen that middle-tier professionals – if properly empowered and supported – can be key to improving the quality of teaching and learning, specifically where they provide support, collaboration opportunities, accountability and monitoring, and instructional direction and system alignment.

The literature is clear that the involvement of middle-tier actors in the design, formulation, and implementation of teaching and learning reforms is critical. In building the trust of stakeholders and helping to shape a culture of school improvement, they can be lynchpins of education reform. The position of these roles within the structure of an education system, and their proximity to schools, is fundamental in creating and maintaining an effective link between policy and practice. Still, too often, the evidence shows that this potential is wasted, as constraints on capacity mean that roles do not lead to beneficial change – or worse, they have negative effects, such as driving inequality.

Assertions that middle-tier structures have the ability to effect either positive or negative change means that they cannot be dismissed as a neutral element of implementation when considering school improvement and reforms.

Evidence in this review indicates that professionals at the middle tier can have a positive impact on teaching and learning outcomes when they play an active role and where capacity is built for them to do so. Table 5.1 illustrates the key ways in which we believe middle-tier actors can influence these outcomes, across the four key functions discussed in this paper.

As education systems evolve, there is scope for the middle tier to significantly stimulate change. Middle-tier professionals will need reconceptualising, and perceptions of their role will need to change from ones of control and inspection to sources of support for teachers. They will also need to develop research capacities for better monitoring, reduce inequity through professional collaboration, and build capacity to develop and share an appropriate vision and strategy across the education system. However, the middle tier will continue to face a variety of challenges in executing these functions. These ongoing challenges must be addressed if we are to see sustained improvements in instructional leadership.

Based on a small but growing literature, we find significant potential to develop the professional agency of middle-tier professionals as a nexus for change and reform in education systems. However, to capitalise on the middle tier as instructional leaders, decision-makers will need to give due consideration to important questions – on the ownership of reforms, management structures, capacity, necessary skills and competencies, cycles of improvement, and feedback mechanisms across the delivery chain. We suggest the following key considerations for policymakers looking to mobilise and support the middle-tier workforce as agents of change:

• How might motivation and agency be ignited in middle-tier roles, so that postholders feel strong professional ownership of instructional reforms?

• How might flatter management structures play a role in reforms, such as collaborative professional working practices, to empower instructional leaders at the middle tier to take charge of local teaching and learning issues?

- How might 'capacity building' interventions shift from building individual skills, to building a sense of collective capacity and professional efficacy across the middle-tier cadre?

- How might school-based practitioners be encouraged to step up as 'system leaders' to deliver functions traditionally associated with middle-tier professionals?

- How can the right skills and competencies be explicitly nurtured in instructional leaders to lead teacher professional learning?

- How could instructional leaders be supported to lead cycles of improvement with schools, rather than supervision or training events?

- How could instructional leaders champion system learning? For example, how could they be supported to identify and scale high-impact practices across their localities, and to feed back learning to policymakers?

Many of these innovative ways of working depend on 're-norming' (Vitallis, 2009; Anders and Chirwa, 2018): the construction of a new normal and improving professional competencies through coaching and work-based practice of new skills. This presents a significant challenge, but also huge potential for transformative change to improve teaching and learning around the world.

Table 5.1 Four major functions of instructional leaders at the middle tier	
Function	**Instructional leaders at the middle tier can play an important role in:**
Support for school and teaching improvement	• Catalysing school-level reforms to build whole-school capacity for teaching and learning improvement. • Leading school-based professional learning and instructional improvement support, such as coaching. They can add value to teachers and school leaders by role modelling good practices and helping teachers in their school settings to bridge the gap between theory and practice.
Promoting professional collaborations within and beyond schools	• Supporting professional learning through school and teacher networks, in which they can add value by offering logistical support, facilitation skills, and subject matter expertise. • Reducing inequalities, for example, by pairing high- and poorer-performing schools to share practices, and by strategic resource allocation to target resource to where it is needed most.
Ensuring data-driven accountability and monitoring	• Bringing evidence and data-driven approaches to instructional support. They can use benchmarked student learning outcomes data, alongside teaching observations, to power rich diagnostic feedback to teachers on their instruction – but this must be balanced with appropriate support and a culture of trust. • Helping school leaders to interpret data and translate this into instructional strategies for school improvement. This might include processes such as benchmarking from other schools' performance, evaluating the quality of professional learning, and aligning school goals with district goals. • Leading a data-rich culture focused on learning and improvement, including looking at locality trends and evidence, and ensuring feedback into long-term local strategies and plans.
Providing local instructional direction and system alignment	• Setting a shared vision which is owned by key stakeholders. • Defining and aligning an 'instructional core', ensuring this is adapted to context and resilient to short-term initiatives.

Source: Compiled by authors

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A major concern for policymakers around the world is how to design an entire system of education that provides high quality teaching and learning outcomes. This paper aims to make a significant contribution to this debate by looking closely at the middle part of education systems – the regional, district, and sub-district level – as a critical part of the 'machine' for quality teaching and learning at scale. This working paper is part of a joint venture between the UNESCO International Institute for Educational Planning (IIEP), Education Development Trust, and the Education Commission in researching and strengthening roles at the middle tier of education systems. This review sees the potential of these middle tier leaders as a cadre of change agents who work directly with schools and teachers, and who are dedicated to instructional change and professional learning.