# Securing the 21st Century Teacher Workforce: Global perspectives on teacher motivation and retention

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## Foreword

Research shows that nearly half of all new k-12 teachers in the United States leave the profession within five years. The revolving door costs tax payers billions of dollars in recruiting, hiring, preparing –and then losing— new teachers. Further investment is lost in professional development and in building curricular knowledge. Teachers who remain in the profession often move on to other schools, suspending lower-performing schools in cycles of chaotic management by isolated teaching staff who aren't around long enough to build the collaborative momentum needed to leverage student outcomes.

This WISE report, a collaboration between colleagues from UCL and STIR, takes us to Jordan, Scotland, Uganda, Ontario, Uttar Pradesh, and Shanghai. It reflects a diversity of perspectives, and similar challenges. The desire among teachers to improve and to remain in the profession is the common thread running through all the portraits. The authors identify key ingredients for retaining and motivating teachers, such as the importance of developing cooperative relationships among system leaders, collaboration within and among schools, as well as the importance of supporting teacher autonomy within that collaboration.

We often hear the call for better, brighter teachers: 'Nothing will happen without good teachers.' No doubt this is true. Among the myths perpetuated by some policy rhetoric is that we need more teachers from the higher ranks of academic achievers. Yet the brightest among us may not always make the best teachers. According to the evidence, aptitude for good teaching emerges from a range of academic performers. More important than individual teacher talent, as this and other WISE reports demonstrate, is to build communities of collaborative professionalism. Together the reports show that the best teaching emerges through the intentional collaboration of teachers united by a focused vision and flexible leadership. Such school communities are usually the ones most likely to retain those good teachers.

The unstoppable global learning revolution we are part of today holds vast opportunity –particularly for diverse, isolated and disenfranchised communities, whether urban or rural. Evolving learning communities, engaging constant technological change and adapting to new socio-economic pressures, can form the foundations for emerging global education 'ecosystems'. The diverse learning environments emerging now may not resemble schools as we have known them. But they will need to be focal points for strong, cohesive teaching communities where teachers take the latitude to try new, independent approaches. This report, and others in the series, supports the idea that autonomous evidence-informed, but not data-driven teaching communities less subject to testing regimes are best equipped to bring vital critical thinking and other skills to students. And those teachers are more likely to remain in the profession and to thrive as career teachers.

**Stavros Yiannouka**
*CEO*
WISE

**T**he imperative to recruit, develop and retain great teachers has never been stronger or more critical. Rapid technological and social change is exerting extra burdens on those leading schools and school systems. Consequently, the pressure to produce significant and sustainable improvement has become relentless, all too frequently, leading to policy choices that exacerbate poor levels of teacher motivation and retention.

This latest WISE research report, *Securing the 21st Century Teaching Profession,* explores these pressures through the lens of six very different jurisdictions. The research unearths and illuminates the factors that affect teacher motivation and retention, globally. The report underscores how certain policy decisions are negatively affecting teacher motivation and retention. It proposes that locating teachers far more centrally in the policy discourse about school and system improvement is imperative if teacher motivation and recruitment levels are to rise.

The authors propose that focusing on teachers' well-being, as a central policy priority, is an essential contributor to improving teacher motivation, teacher retention, and learner outcomes. They are unquestionably right.

The expert teams from UCL (IOE) and STIR Education, led by Dr Karen Edge, have provided the international community with a powerful treatise for change. This research is a critical reminder that teachers are not just our best asset but rather, are our only asset in the daily pursuit of better outcomes for all learners. Ultimately, what happens in classrooms profoundly shapes the lives and life chances of millions of young people.

In summary, this WISE report is a major contribution to the international debate on teachers' motivation and retention. It offers a global analysis that is long overdue and critical insights that are compelling.

For policy makers, it is an urgent wake-up call. For teachers, everywhere, it is a *tour de force.*

**Dr Alma Harris FRSA**
*Professor of Educational Leadership and Policy*
University of Bath

# Executive Summary

As a diverse global team, we are deeply committed to finding ways to better understand and, in turn, support education systems as they strive to improve. We recognize that while each education system faces unique challenges, the recruitment, development, and retention of teachers emerges consistently as a common international priority. We have noted one recurring and—in most countries—escalating educational concern: teacher shortage. While the discussions about access to education continue, many jurisdictions are now turning to, possibly, more productive conversations about teacher knowledge and skill development. These systems are actively seeking strategies to improve overall teacher effectiveness and retain experts in the classroom. The importance of a knowledgeable, skilled, and motivated teacher cadre remains almost undisputed. However, in many countries, this most important of assets is often underrepresented in progressive policy discussions designed to manage and secure the future education workforce.

We acknowledge that recruitment is important, especially in systems with rapidly rising student intakes and low public perceptions of teachers. We strongly believe that not enough attention is being paid to motivating and developing teachers to support their full participation in the education system, including collaborating with peers and informing the policies that influence their work and lives. Similarly, much policy and research attention focuses on teacher recruitment. We believe that caring for teachers and creating inspiring and supportive working conditions will support the retention of teachers we already have in our systems. Teacher retention needs to become a high policy and research priority.

The collaboration between our University College London Institute of Education-based (UCL IOE) team and STIR Education emerged over several years as we independently, and at times collectively, worked to understand and improve education systems in our respective contexts. Throughout our discussions, we recognized our converging interest in pushing our collective understanding of how different systems address issues of teacher and leader recruitment, development, and retention. From STIR's perspective, we bring an interest in motivation at all levels of the system, from the child and the teacher to district- and central level government officials to thereby enable sustained improvements in teaching practice and student learning. From UCL IOE's perspective, we bring an interest in how systems create conditions that inspire teachers to remain in the profession. Together we bring an interest in exploring systems that are just beginning to reshape their approaches to teacher professional workforce management.

Teachers play the central and most important role in assuring their students', schools' and system-wide success. The core purpose of our WISE-funded *Securing the 21$^{st}$ century teacher workforce* project is to reflect on how different jurisdictions are approaching their very individual, yet often shared, challenges in securing their current and future teacher cadre. We set out to learn more about how systems design processes and structures to recruit, train, develop, and retain the high quality teachers their students deserve. There is much to be learned by examining different systems, with different approaches, to share strategies and "identify challenges and possible opportunities. Our six jurisdictional studies do just that.

## The Study

The purpose of the *Securing the 21$^{st}$ century teacher workforce* project is to explore how governments, states, districts, schools, and non-governmental actors are working to support teachers, with a sharp focus on the relationship between teacher motivation and teacher retention. We gathered and interrogated evidence and experiences from systems that are working, in various ways, to harness motivation and support teachers and leaders. Additionally, we sought to understand the factors and system-wide conditions that influence teacher motivation, particularly in the light of the urgency of reigniting this motivation to create sustained improvements in student learning.

The *Securing the 21$^{st}$ Century Teacher Workforce* study is an innovative co-created and co-curated international project. The project was designed, from the start, to be curatorial in nature. We wanted to bring together a team of global researchers to begin to shine light on how different education systems were approaching the opportunities and challenges of securing their future education professionals. We did not have the scope to be able to spend time in schools and districts in each jurisdiction. However, we did have the amazing opportunity to begin to construct a deeper understanding of some of the most interesting educational jurisdictions in the world at national, province/state, and city level. Following the publication of the report, we will launch a blog series featuring interviews with researchers and policy leaders from each system as well as a Thought Leader interview series. Our goal is to curate a unique contribution to global conversations about teacher motivation and retention.

We took a multi-layered approach to understanding teacher motivation, retention, and professionalism. In each jurisdiction, we established university or NGO-based research teams, which conducted jurisdictional policy studies based on publicly available documents. In turn, we set out to focus on how a small group of educational policy leaders and advocates from government, non-governmental organizations, and unions understand the state of their educational system and its influence on teacher motivation, development, and retention. We conducted semi-structured interviews with key policy leaders to explore and interrogate evidence emerging from the policy studies. The resulting studies illustrate how various stakeholders understand the state of each education system and their perspectives on the factors and conditions that influence teacher motivation, professionalism, and retention.

Jurisdictional selection criteria were also varied and resulted in our selection of two jurisdictions continuously recognized by PISA for performance (Ontario, Shanghai) and four recognized for their innovative approaches to recruiting, developing, motivating, and/or retaining teachers (Uganda, India, Jordan, and Scotland).

The questions guiding the project in each jurisdiction are:

- What are the policies and practices designed to influence teacher work, motivation, and retention?

- How do policy and practice leaders describe the current state of the profession?

- What factors and conditions do policy and practice leaders believe contribute to the current state of the teacher workforce?

- Are there specific policies and/or strategies in place, or planned in the future, to improve the factors and conditions that influence teacher work, recruitment, development, motivation, and retention?

## The Report

To frame our work across the six jurisdictions and our proffered reflections on *Securing the 21st century teacher workforce,* our report begins with a detailed description of how and why we selected our six study jurisdictions. More specifically, we were intrigued to know more about jurisdictions consistently doing well on international league tables. We wanted also to include systems that were actively creating innovative partnerships and strategies to improve teacher work and lives and student outcomes, but which may have yet to achieve their ambitions fully. To recognize the vastly different contexts around the world, we explicitly selected very different education systems within which to examine local, national, and global structures and perceptions of the health of the teaching profession. To this end, our global team set out to take snapshots of teacher-focused policy and practice at three levels: country level (Jordan, Scotland, Uganda), province/state level (Ontario, Uttar Pradesh), and city level (Shanghai).

We provide a quick review of recent intergovernmental and agency reports to frame the emerging narrative around teacher motivation, commitment, and professionalism that appears to be gaining increasing political and practical traction. In turn, we draw on current and historic academic research to define and inform the design and analysis of the jurisdictional studies. While there are limitations to any review conducted and presented in such limited space, we have selected the themes and ideas that most closely and consistently resonate with the national and local discussions about ensuring desirable and manageable careers for teachers to ensure teacher wellbeing and retention. These include: motivation; recruitment; retention; autonomy; professionalization; commitment; self-efficacy; professional learning; and, wellbeing.

**Emerging Findings from Our Studies**

Studies align with the themes explored in both the 20-year policy reviews and interviews with between 8-15 policy leaders in each system. Studies include the following sections: State of the Profession and Public Discourse; Education Policy and Strategy; Teacher Recruitment; Teacher Career Paths; Teacher Retention; Teacher Motivation; Teacher Professionalism; and, Teacher Wellbeing.

The studies demonstrate that motivation is complex and contextually specific. Each system defines common terms in their own way and is creating policy strategies to address their specific needs. Echoing the calls for greater attention to the working lives of teachers, the empirical and policy evidence presented in the studies identifies various perceptions of and approaches to supporting teachers at different stages of their careers. Teacher motivation is clearly not exclusively intrinsic. Opportunities to participate in decision-making, collaboration with peers, and school and system-level structures coalesce to create the conditions that can contribute to improved teacher motivation. Teachers at different life and career stages and in different geographical contexts demand different types of support to reach and sustain peak performance. Drawing on the range of aforementioned evidence sets, we posit eight observations with embedded policy and research recommendations that we believe will contribute to nurturing, sustaining, and retaining motivated teacher talent to support jurisdictions as they work to secure their 21st century workforces. These include:

1. Teacher motivation matters.

2. Highly (school-based) decentralized systems may need to work harder at retention.

3. Cooperation at the top of the system, matters.

4. Public perception of teachers, schools, and education, matters.

5. Opportunities to collaborate at school and across schools, matters.

6. Autonomy gains importance in the context of collaboration.

7. Beyond career ladders: ladders are helpful, but are they the only solution?

8. One size does not fit all when it comes to incentives and rewards.

9. Strategic collaboration supports the design and implementation of new policies.

**Policy and Research Recommendations**

Drawing from the cases and our roster of observations, the report puts forward a set of policy and research recommendations that we believe will contribute to securing the 21st Century teacher workforce by recruiting and retaining motivated teachers. The advice sets out our key aspirations for policy leaders as they continue to build and refine their teacher workforce policies. Many of our policy recommendations require robust evidence to inform the design and implementation phase. In turn, we provide research colleagues with our most pressing questions related to the system-level management of teacher motivation, commitment and retention. Explored in more detail in the full report, we focus our advice to policymakers and researchers on the following priority areas of interest and action.

**Recommendations for Policymakers**

- Initiate differentiated teacher motivation supports and interventions that reflect regional, career stage, and generational differences.

- Adopt system-specific strategies to mitigate possible structural retention challenges.

- Make high-level cooperation between leading actors and agencies a governmental priority.

- Prioritize positive public perception of and confidence in the system.

- Curate purposeful and meaningful opportunities for teachers to learn from each and with each other and inform the system.

- Galvanize discussions on teacher-informed evidence-based strategies to support teacher autonomy and motivation.

- Adopt career structures and strategies that reflect the needs and desires of the newer generations of educators.

- Differentiate and innovate when seeking solutions to teacher motivation.

- Create positive system-wide policy habits and expectations.

**Recommendations for Researchers**

- Investigate system-level support strategies to enhance teachers' motivation, accounting for variations in generational, regional, and career and life stages.

- Explore possible relationships between system-level structures and teacher retention.

- Broadly examine the process and impact of high-level cooperation and its potential influence for educators and educational outcomes.

- Investigate relationships between positive public perception of the teaching profession and recruitment and teacher retention.

- Develop a richer knowledge of how generational, life course and jurisdictional factors influence educator career motivations.

## Conclusions

The opportunity to explore the education policy and practice context of one jurisdiction is an honor. Working across six countries, province/states, and districts simultaneously is an honor and an adventure. When we set out, our intention was to understand more about the structures and systems that influence the work and lives of teachers. We wanted to venture into jurisdictions that are rarely studied as well as those that are firmly cemented as go-to destinations of interesting practice. We wanted to test our own assumptions by conducting, almost, a system- and policy-level health check of the teaching profession. We visited jurisdictions in high and lower income countries. While there are radical differences in the opportunities and challenges facing their education systems, they all share the essential need for a strong and motivated teacher workforce to help deliver their educational ambitions. Our selection of jurisdictions was partly to demonstrate that it is possible to learn about and absorb the lessons from every jurisdiction.

The purpose of this project is to explore how governments, states, districts, schools, and non-governmental actors are working to support teachers, with a sharp focus on the relationship between teacher motivation and teacher retention. We gathered and interrogated evidence and experiences from systems that are working to harness motivation and support teachers and leaders. Additionally, we sought to understand the factors and system-wide conditions that influence teacher motivation, particularly in the light of the urgency of reigniting teacher motivation to improve student learning in a sustained manner. Our focus on motivation nests in our prolonged passion for understanding and addressing teacher recruitment, development, and retention.

**Our Next Steps with WISE to Support the Project**

For our IOE UCL and STIR teams, gathering the evidence for this report is only one strand of how we intended to contribute to the discussions and actions related to the nine observations above. At IOE UCL, with STIR support, through our website we will be curating a series of Thought Leader interviews and blog posts from across participating countries and will also include other leading thinkers and doers on motivation and retention in the education sector. All resources will be available on our website, which will launch in February 2018. STIR colleagues, in collaboration with education experts globally, are continuing to collaborate with the governments of India and Uganda to carefully test and learn about innovative and contextualized approaches to improve motivation at all levels of the education system, while simultaneously building capacity in these education systems to scale and sustain these approaches. By doing so, STIR intends to support governments and organizations with practical learning towards financing, implementing, and measuring effective approaches to improving teacher motivation and thereby impacting student learning.

# Acknowledgments

**Chapter 1**

# Securing the 21st Century Teacher Workforce: Global perspectives on teacher motivation and retention

Teacher recruitment, development, and retention are a featured priority in the United Nations' (UN) Sustainable Development Goals (SDGs). Building on the Millennium Development Goals (MDGs), the SDGs prioritize nine goals, including SDG 4 focusing on 'Quality Education' to 'ensure inclusive and quality education for all and promote lifelong learning for all.' More specifically, Target 4c specifies that by '2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States.'

Within this heightened global policy focus on teacher qualifications and supply, the global education race persists and accelerates as countries and local jurisdictions constantly strive to benchmark themselves against each other. The Programme for International Student Assessment (PISA), Trends in International Mathematics Science Study (TIMSS), and other global comparative surveys have created a unique and powerful opportunity for policymakers, educators, and the public to scrutinize educational performance. Even though these measures are widely considered to be narrow in scope, predictable policy reactions to poor system-level performance on this new global educational stage include curriculum and certification revisions underpinned by a general sense of policy unrest. The media will often take hold of and champion the most negative narratives. This increasingly measured and globalized environment has an instrumental knock-on effect on the work and lives of students, teachers, and leaders. However, even within these stormy national and international conditions, teachers consistently strive to retain their focus. Their most important role—creating the best possible opportunities for their students to learn—remains central to their ambitions. In each system, the overall structures and systems may occasionally make teacher-driven classroom-based tasks increasingly difficult. These, in turn, may influence teacher retention and motivation.

Different education stakeholder groups have reached consensus regarding the undisputable influence of teachers on student learning and achievement. While the evidence base contributing to global knowledge of how teachers influence student learning is growing, much of this research emerges from and focuses on education in high-income countries. Studies show that a number of characteristics affect this equation, including teacher quality, attitude, effectiveness, and motivation (Rand, 2012; Hattie & Yates, 2013). Though policy aimed at improving student outcomes focuses on how to recruit and retain high-quality teachers, it often fails to take into account the factors related to improving teacher performance by enhancing access to meaningful professional learning (Cordingley, 2015; Kennedy, 2016), supportive school-level conditions (Schleicher, 2016; Thoonen et al, 2011; Anderson & Mundy, 2014; Muijas et al, 2014), and teacher wellbeing (Zee & Koomen, 2016) within and beyond schools. These structural supports, in turn, have an influence on teacher attendance, commitment, and motivation to remain and develop in the role (Skaalvik & Skaalvik, 2011). Throughout the research, the importance of teacher motivation, teacher commitment to both their organization and the profession and their belief in their ability to do their job (self-efficacy) are implicated as key factors in teacher retention. As such, each will be a key focus of the system-level studies.

For many countries, teacher supply — simply having teachers in the classroom — has gained momentum as the most pressing issue for policymakers and school leaders. However, although teacher commitment and motivation have been strongly linked to teacher retention, neither has ascended to the top of the policy priority lists in most systems. In 2016, according to the UNESCO Institute of Statistics (UIS), global teacher shortages were estimated at 68.8 million (UNESCO eAtlas, 2016). While the severity of teacher shortages varies significantly, countries with rapidly accelerating student numbers are often the hardest hit as they widen participation and increase access to education. Within countries, there is often disparity in teacher working conditions as access to personal and educational resources varies greatly between urban and rural areas. Compounding this challenge, mass global migration patterns due to conflict and other global issues are creating unprecedented pressure on some education systems to recreate themselves to address the newfound, and often unexpected, demand. Teacher shortages are also emerging in jurisdictions with less dramatic shifts in student growth. Teacher shortage has become an easy shorthand to describe systems in which there are simply not enough teachers to fill school-level roles. The consequential influence of lack of teachers, in the best case, may include teachers teaching beyond their subject knowledge. Recruitment challenges may also lead to teachers teaching without qualifications. In the worst case scenarios, teacher shortage can mean no adults turning up to work, resulting in unsupervised children during the school day. As a result, for teachers in and on the job, they may also need to work harder to cover the work of their absent colleagues.

Teacher shortages may result from fewer individuals choosing to train as teachers. In many areas, the status of teaching as an attractive profession may be dwindling as a result of low pay, unsatisfactory working conditions, and/or an ongoing public discussion placing low public value on the teaching profession, schools, and the education system as a whole. These factors also influence teachers' motivation once in the role. In some countries, while entry-to-the-profession numbers are buoyant, ensuring teachers are developing excellent pedagogical and pastoral knowledge and skills as well as sustaining their commitment to teaching may be a challenge. Finally, teacher retention is also emerging as a key teacher shortage-related issue. Teachers leaving the profession prematurely due to early retirement or disinterest in remaining also increases teacher shortages and places pressure on the system. We believe that generational work patterns (Edge, 2014), increasing accountability, and decentralization may also be unexplored influences that may be changing the very nature of teacher career structures (Edge, 2017).

Globally, teacher shortages are affecting the work and outcomes of local and national education systems. An increasingly loud and coherent chorus of agencies, governments, and educational advocacy organizations is speaking up about current and anticipated teacher shortages. The collective call? When education systems cannot recruit and retain enough qualified, skilled, and motivated teachers, student learning and achievement become more

challenging, if not impossible. Within more fragile education systems, teacher shortages influence the day-to-day management of teaching and learning due to teacher attendance issues, burnout and exhaustion from increased workload. Additionally, due to the scarcity of sufficient teachers, those remaining often lack collaborative professional learning opportunities, which, if sustained, can be demotivating.

Within this context, rapidly changing and increasing expectations of teachers prevail across most jurisdictions. Change is often the new normal—often inspired by international performance-table rankings and educational fads. Even the slightest shift in national or local policy can have an influence on the day-to-day work of teachers. In the longer term, working conditions strongly influence teacher motivation to continuously learn and develop their practice and remain in the profession. Although addressing recruitment and retention is important, current research points to the importance of better understanding the motivating factors that are the source of energy by which teachers create their magic. Ensuring that teacher workforce numbers and passion remain buoyant means expanding knowledge of how to attract potential teachers into the profession and how to retain them once they enter (Dörnyei & Ushioda, 2011; Han & Yin, 2016). Similarly, policy-level focus on the conditions that support system-wide recognition of the value and needs of its teacher workforce and its resulting school-level interventions are often missing.

In the wake of global efforts to creatively meet teacher demand-and-supply challenges, governments and their partners often turn their attention to national teacher development policies aimed at improving teacher professional development and performance. Many are guided by policy and practice steps inspired by the MDGs, which have almost halved the number of children with no access to primary education worldwide (UNESCO, 2016). As part of the 2030 Agenda for Sustainable Development, the UN General Assembly ratified SDG4.4c outlining the ambition by 2030 to "substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States" (UN Res. 70.1 2016, p.17). Some governments focus on nurturing a stronger sense of teaching as a profession by leveraging credentialing and development requirements. Jurisdictions with more stable teacher workforces may redouble their efforts to support their teachers by enhancing conditions that support greater teacher autonomy and relationship building to reinforce commitment, and ideally, retention.

From our shared vantage point as university-based researchers and teacher-focused NGO leaders, we believe urgent action is required across many jurisdictions to better understand and acknowledge patterns and possibilities related to teacher recruitment, development, and retention. Many education systems continue to approach developing a motivated teaching profession from a 20th century-rooted paradigm of carrots and sticks. Carrot-and-stick models often reward good performance while punishing bad performance. In these conditions, the measure of *good* teacher performance often narrows, with

performance linked to outcome measures including student test scores. Recent examples of such 20th-century approaches to teacher motivation include teacher performance payments and biometric finger scans. While student test performance provides an important benchmark of student learning, it is only one measure of student development. When adopted, incentive pay linked to student performance frequently only relies on quantitative standardized measures as evidence. Increasingly, we believe that such approaches are outdated and fail to improve pedagogy and teacher motivation and commitment. As a result, there is a less than positive influence on the overall educational quality in a system. This often occurs because extrinsic financial and non-financial incentives and rewards may fail to address the root cause of why teachers are demotivated and are either underperforming or are leaving the profession in the first place.

## The Origin of Securing the 21st Century Workforce Project

As a diverse global team, we are deeply committed to finding ways to better understand and, in turn, support education systems as they work to improve their unique, yet interlinked challenges. We recognize that while education systems face unique jurisdictional challenges, the recruitment, development, and retention of teachers is emerging as a common international priority. In our individual work, we have noted one recurring and—in most countries—escalating educational concern: teacher shortage. While the discussions about access to education continue, many jurisdictions are turning to possibly more productive conversations about teacher knowledge and skill development and are seeking strategies to improve overall teacher effectiveness in the classroom. The importance of a knowledgeable, skilled and motivated teacher cadre remains almost undisputed. However, in many countries, this most important of assets is often underrepresented in progressive policy discussions designed to recruit and retain school-level professionals.

The collaboration between our University College London Institute of Education-based (UCL IOE) team and STIR Education emerged over several years as we independently, and at times collectively, worked to understand and improve education systems in our respective contexts. Our UCL IOE-based team was actively engaged in Global City-level studies of generational trends in school leadership in London, New York City, and Toronto (Edge, 2014; Edge, Descours & Oxley, 2017) while STIR accelerated their innovative model of fostering teacher innovation networks in Uganda and India (http://stireducation.org). Throughout our discussions, we recognized our converging interest in pushing our collective understanding of how different systems are addressing issues of teacher - and leader- recruitment, development, and retention. From STIR's perspective, we bring an interest in motivation at all levels of the system, from the child and the teacher to district- and central level government officials to thereby enable sustained improvements in teaching practice and student learning.

Our WISE-funded project was designed, from the start, to be curatorial in nature. From its inception, the *Securing the 21st Century Workforce* Projec*t* created a series of lofty ambitions. We wanted to bring together a team of global researchers to begin to shine light on how different education systems were approaching the opportunities and challenges of securing their future education professionals. We did not have the scope to be able to spend time in schools and districts in each jurisdiction. However, we did have the amazing opportunity to begin to construct a deeper understanding of some of the most interesting educational jurisdictions in the world at the national, province/ state, and city level.

Together, we committed to curating a set of evidence-based studies exploring how very different jurisdictions across the world are tackling issues of teacher recruitment, development, and retention. More specifically, we were intrigued to know more about jurisdictions consistently doing well on international league tables, those creating innovative partnerships to improve teacher work and lives as well as student outcomes, and systems working hard to reflect and redefine their already strong priorities. Inspired by Sinclair's work on pre-service teachers (2008), we wanted to reflect the need to examine teacher experience over their entire career span to understand more about their motivation and intentions to remain in the profession. As such, we considered the attractiveness of the profession, training and certification processes, and professional expectations (Sinclair, 2008; Han & Yin, 2016). To recognize the vastly different contexts around the world, we explicitly selected very different education systems within which to examine local, national, and global structures and –in some ways- investigate perceptions of the health of the teaching profession. As such, we took snapshots of teacher-focused policy and practice at country level (Jordan, Scotland, Uganda), province/state level (Ontario, Uttar Pradesh), and city level (Shanghai).

The purpose of this project is to explore how governments, states, districts, schools, and non-governmental actors are working to support teachers, with a sharp focus on the relationship between teacher motivation and retention. We gathered and interrogated evidence and experiences about how systems are working to nurture current and future teachers. Additionally, we sought to understand the factors and system-wide conditions that influence teacher motivation, particularly in the light of the urgency of reigniting teacher motivation to improve student learning in a sustained manner. Our focus on motivation nests in our prolonged passion for understanding and addressing teacher recruitment, development, and retention.

**This Report**

The report unfolds in four key sections. First, we briefly describe the research design and approach for our rather ambitious project. Second, we provide a light-touch review of the existing policy and research we used to underpin the design of the project. The reviews illustrate shifts in practical and theoretical work related to teacher motivation and retention. Key factors influencing a motivated and committed teacher workforce are identified. Third, members of our global research team provide a brief snapshot of their jurisdictional findings. Each mini-jurisdictional study is the product of desk-based policy reviews and between 10 and 15 policy leader interviews. In conclusion, we identify common themes across the systems, before presenting a series of key opportunities for educational systems to consider as they work to secure their 21st century educational workforce.

## Project Strategy and Design

The *Securing the 21st Century Teacher Workforce* study is an innovative co-created and co-curated international project. To understand more about the diversity of approaches to teacher recruitment, development, and retention, we focused on six jurisdictions across the world. We wanted to focus on different system levels as well to ensure that we gathered snapshots of local or city-based efforts, province/state-level activities, and national undertakings. Jurisdictional selection criteria were also varied and resulted in our selection of two jurisdictions continuously recognized by PISA for performance (Ontario, Shanghai) and four recognized for their innovative approaches to recruiting, developing, motivating, and/or retaining teachers (Uganda, India, Jordan, and Scotland).

We took a multi-layered approach to understanding teacher motivation, retention, and professionalism. In each jurisdiction, we established university or NGO-based research teams, which conducted jurisdictional policy studies based on publicly available documents. In turn, we set out to focus on how a small group of educational policy leaders and advocates from government, non-governmental organizations, and unions understand the state of their educational system and its influence on teacher motivation, development, and retention. We conducted semi-structured interviews with key policy leaders to explore and interrogate evidence emerging from the policy studies. The resulting cases illustrate how various stakeholders understand the state of each education system and their perspectives on the factors and conditions that influence teacher motivation, professionalism, and retention.

The questions guiding the project in each jurisdiction are:

- What are the policies and practices designed to influence teacher work, motivation, and retention?

- How do policy and practice leaders describe the current state of the profession?

- What factors and conditions do policy and practice leaders believe contribute to the current state of the teacher workforce?

- Are there specific policies and/or strategies in place, or planned in the future, to improve the factors and conditions that influence teacher work, recruitment, development, motivation, and retention?

The three strands of project included charting the research evidence base (Strand 1), developing jurisdictional case studies (Strand 2), and interviewing educational Thought Leaders, from beyond our initial cohort of interviewees, on hot topics emerging from the studies (Strand 3). This report draws on the evidence developed across the review of the academic literature on teacher motivation, commitment, professionalism, and retention. Data collection consisted of an academic literature review of the existing evidence related to the key concepts above. The policy study, Strand 2, consists of two distinct yet overlapping pieces of work contributing to the generation of case studies of each jurisdiction: developing policy-based studies based on the analysis of publicly available policy documents, and conducting an analysis of interviews from 10 to 15 policy leaders. Individuals were purposefully selected to participate based on their organizational affiliation and role.

## Jurisdictional policy and practice evidence

In order to develop a better understanding of the policies influencing the teaching profession in each jurisdiction, our local research teams engaged in an analysis of three unique, yet often overlapping, strands of education policy and practice. The studies within the report represent the outcomes from the analysis of the jurisdictional resources and interviews including:

- **A 20-year policy trajectory.** Within each jurisdiction, every research team identified and examined national, state/province, and/or city-based education policies that directly or indirectly influenced the working lives of teachers. We were interested in policies that had been both introduced and formally implemented by government. We selected a 20-year time window and narrowed the final selection of policies to those that either intentionally or unintentionally influenced teachers' working lives. Teams used a shared rubric for analyzing policy documents that included recording the following information:

start and finish date, author, evidence base, what the policy/ act aimed to influence, i.e. initial teacher training, teacher certification, continuous professional development, school level organization, what teachers do (contact hours, leave), professionalism, pedagogy, teacher career, curriculum, systems, factors, conditions.

- **Educational landscape and actor map**. To create a robust picture of the structure of each educational jurisdiction, each team generated a list of the different stakeholders within the education system: governmental, non-governmental, academic, and union organizations. We were specifically interested in organizations that have direct and/or tangential influence on the working lives of teachers. For each identified organization, teams gathered information from public resources on the following: system structures (how many states/provinces, districts), types of school, language of diversity, student with different educational needs, student additional languages, teacher training colleagues, teacher salaries, funding per pupil, required days to teach, teacher holidays, teacher training days, teacher pension, total number of schools, private vs. public, religious/ non religious schools, rural/ urban schools, population of students (male/female, special educational needs, categorizations of students, additional languages), average school and class size, total number of head teachers/ deputy head teachers/ senior leaders and the diversity of the teams, student school starting and finishing age, formal assessments in primary and secondary schools. This analysis enabled teams to create jurisdictional pictures of the structures and organizations within each system.

- **Teacher certification and induction.** To understand more about the career journeys of teachers in each jurisdiction, teams identified and analyzed the various training, certification, induction, and ongoing development opportunities and requirements. This element of the policy study created a temporal pathway to understand how teachers enter and remain in the profession, examining their journey into and throughout their teaching careers.

### Policy and practice leader interview evidence

Following the identification of key actors within each jurisdiction, team members used a centralized protocol to invite between 10 and 15 policy leaders/influencers to share their own perspectives on the current state of the teaching profession. Again, using a standardized global protocol for conducting, recording, and analyzing the interviews, members of the local jurisdictional teams explored four strands of inquiry with participants. Ethical

approval for the study was sought and received by the UCL Ethical Review Panel. Interviews touched on the current state of the profession, working conditions of teachers, collaboration between different system-level actors, and the public discourse about teachers and education. Second, education policy ambitions, implementation, and monitoring practices were discussed. Teachers' work, lives, and careers were considered alongside their career paths, recruitment, motivation, commitment, wellbeing, autonomy, and leadership. Finally, participants shared their views on current and historical teacher standards, enforcements, and rewards.

## Accelerating Research and Policy Interest in Teacher Motivation

Teachers play the central and most important role in assuring their students', schools and system-wide success. As many systems have had to widen participation in the teaching profession to meet student-led demand, alternate and quick fix solutions have been adopted to recruit and prepare teachers. Even with numbers of teachers entering the profession on the rise in many countries, retaining teachers in their schools and wider education systems remains a challenge in many jurisdictions. Our purpose is not to comment on the validity or influence of recruitment and training strategies, but to reflect on how different jurisdictions are approaching their very individual, yet often shared, challenges in finding, developing, and retaining the high quality teachers their students deserve. We believe there is much to be learned by examining different systems, with different approaches, to share strategies and identify challenges and possible opportunities. Our six jurisdictional studies do just that.

The Millennium Development Goals and Education for All have increased access to primary education worldwide (UNESCO, 2016; Crehan-IIEP, 2016) albeit with persistent gender, regional, and economic determinants of access. However, persistent and growing attention is shifting to the quality implications of widening participation in the education sector. Improvements in the overall quality of education delivery have not kept pace with improvements in access (Hakielimu, 2011; EU, 2013). One of the reasons for the lag is often related to the need for education systems to increase the pool of motivated and skilled teachers available to teach the ever-growing student populations as included in the Secretary-General's Progress towards the Sustainable Development Goals (2016) report, achievement of the ambitious SDG4 is predicated on meeting the demand for nearly 26 million primary school teachers by 2030. Drawing on African statistics, the report highlights how '7 of 10 countries are experiencing acute shortages of trained teachers.' Teacher shortages are also creating challenges in high-income regions and countries. Whether a system has a rapidly expanding student population or a long-standing high-level attendance and completion rate, they have something in common: the need for confident and committed teachers.

To frame our work across the six jurisdictions and our proffered reflections on securing the 21st century teacher workforce, we begin with a quick review of recent intergovernmental and agency reports to frame the emerging narrative around teacher motivation, commitment, and professionalism that appears to be gaining increasing political and practical traction. In turn, we draw on current and historic academic research to define and inform the design and analysis of the jurisdictional studies. While there are limitations to any review conducted and presented in such limited space, we have selected the themes and ideas that most closely and consistently resonate with the national and local discussions about creating desirable and manageable careers for teachers to ensure teacher wellbeing and retention.

## The Global Policy and Advocacy Dialogue

Ensuring that teachers are attracted to and well prepared for their roles, receive timely and meaningful professional development opportunities, and feel motivated to continuously develop and remain in the profession are now top of mind for international educational organizations and national and local governments alike. This growing consensus champions the importance of teachers and their need for meaningful and motivating learning and support. To place our curatorial efforts in the context of greater global conversations about teachers, we highlight recent research and advocacy efforts by powerful organizations and agencies including Education International, OECD, and the World Bank. We also want to draw on the important work of teacher-focused projects including the Teacher Motivation Working Group. The second phase of the project will invite experts from these organizations to participate on our Though Leader interview and blog series to ensure our WISE-funded project contributes to on-going conversations while also supporting the amplification of the important work of these organizations and groups.

To contextualize our own interest in how jurisdictions are supporting and nurturing teachers, we conducted a light-touch review of recently commissioned research studies from a range of multi-lateral, non-governmental, and advocacy organizations. Echoing the recent acceleration in academic research, studies examine: the professionalization of teaching (EU, 2013; Shrestha, 2014; TALIS-OECD, 2014); changes in traditional career progression (World Bank, 2009; Crehan-IIEP, 2016); and support for teacher involvement and leadership of policy creation processes (Bangs & Frost, 2012). The reports collectively identify teacher shortage as a critical, almost globally pertinent issue. Increasingly, the report identifies that educational systems are creating opportunities for teacher collaboration as a means to support teacher professional development. The outcomes of recent reports and initiatives dovetail and reinforce the need to consider teachers as people with professional lives within schools', and the education system. Refreshingly, teacher wellbeing and motivation are increasingly gaining traction within research and advocacy. This focus reinforces the importance of recognizing the adults working in our education systems with different expectations and needs at different stages in their careers.

For example, Sub-Saharan African regions often struggle to develop a buoyant teacher workforce. This is attributed to the following: limited, inefficient teacher training; high attrition rates; poor working and living conditions; minimal professional development opportunities; and often weak appraisal and supervision structures (World Bank, 2007). Responding to lean resourcing and pressing demand, governments and partners are left seeking creative solutions within the funding wallets available, including developing "new approaches to recruitment; pre-service and in-service teacher development; and improvements in the deployment, utilization, compensation, and conditions of service for teachers" (World Bank, 2007, p.14). In addition to fast-track teacher training programs, one frequent response is to create cadres of contract teachers who are often uncertified and less expensive. With less job security and preparation for the role, contract teachers are occasionally perceived to be more easily managed by the system. However, if adopted as a long-term solution, gaps between permanent and contract teachers may accentuate ambitions to ensuring professional standards as well as buttress positive public perception of and confidence in school-level professionals.

To understand underlying reasons for qualified teacher shortages, recent studies examine policies supporting high quality teacher recruitment and retention to recommend strategies to improve both. Consistently, report findings reinforce the notion that teachers are motivated to join the profession for altruistic reasons (HakiElimu, 2011; Shrestha, 2014) and based on "a desire to transmit values, to work with children and young people, and to feel they are doing work that is socially relevant" (EU, 2013, p.11). The VSO International Task Force for Education for All (2014) similarly suggests that the primary motivation for teaching stems from personal growth and working with pupils (Shrestha, 2014). This echoes Richardson and Watt's (2014) description of three value constructs potentially underpinning an individual's decision to pursue teaching. The social utility value speaks to the desire to help, work with children, and make a contribution to the wider society. Two additional value constructs include the belief in the intrinsic value of teaching and a personal utility value linked to a belief that teaching will provide job security and time for life beyond the school to tend to personal responsibilities.

Guajardo (2011) examined teacher motivation in countries where Save the Children works. The report contends intrinsic and therefore significant long-term motivating factors are only possible once more basic, extrinsic, and environmental needs are met. Meeting extrinsic needs is not enough to motivate teachers; however, they serve as the foundation for the higher order needs of professionalization, achievement, and self-actualization (Guajardo, 2011). As above, when accountability, decentralization, and workload continue to escalate in many jurisdictions, the utility value of teaching may be in decline, and focusing on structural solutions to bolster and influence the intrinsic and social utility value may become even more important.

Cumulatively these reports argue for: professionalizing the job of teaching (World Bank, 2009); improving initial teacher education (Hakielimu, 2011; EU, 2013); CPD and opportunities for teacher collaboration (EU, 2013; Shrestha, 2014; TALIS-OECD, 2014); teacher involvement in decision-making (World Bank, 2009; Save the Children, 2011; TALIS-OECD, 2014); changes in the administration of career progression (World Bank, 2009; Save the Children, 2011; Crehan-IIEP, 2016); and bolstering recognition and prestige of the profession (Save the Children, 2011; EU, 2013). These are themes that dovetail with those emerging from the empirical academic research community.

## Teacher-focused Policies

There remains an urgent need to gather and understand the evidence regarding the relationships between teacher policy and teacher quality and, in turn, improved student outcomes (World Bank, 2014; TALIS-OECD, 2013). In 2014 the World Bank-SABER[1] initiative undertook a comprehensive study into global teacher policies intended to "ensure that every classroom has a motivated, supported, and competent teacher" (World Bank 2014, p.24). The resulting working paper, What matters most for teacher policies, identifies eight Teacher Policy Goals based on an analysis of highly successful educational systems and their "corresponding policy levers." The required government actions needed to achieve the Teacher Policy Goals are 1. setting clear expectations for teachers; 2. attracting the best into teaching; 3. preparing teachers with useful training and experience; 4. matching teachers' skills with students' needs; 5. leading teachers with strong principals; 6. monitoring teaching and learning; 7. supporting teachers to improve instruction; and 8. motivating teachers to perform (World Bank, 2014, p.24).

Looking to synthesize these findings and proffer new teacher retention and motivation-focused policy solutions, Educational International's commissioned work by Bangs & Frost (2012) on teacher self-efficacy, voice, and leadership is helpful. The authors bring forth seven points regarding the creation of an enabling policy environment for the enhancement of teaching profession:

1. Policy should lead to the provision of opportunities and support for teachers to exercise leadership in the development and improvement of professional practice.

2. Policy should seek to establish the right to be heard and to be influential at all levels of policymaking, including the content and structure of the curriculum.

3. Policy should protect and enhance teachers' right to determine how to teach within the context of collegial accountability.

4. Policy should support teachers in setting the direction of their own professional development and in contributing to the professional learning of their colleagues.

1. SABER-Teachers is part of the SABER initiative (Systems Approach for Better Education Results), which aims to help the World Bank and its development partners identify actionable priorities for strengthening education systems and equipping children and young people with knowledge and skills for life.

5. Policy should recognize the key role that teachers have to play in building collaborative relationships with parents and the wider community.

6. Policy should promote the role of teachers in pupil assessment, teacher appraisal, and school evaluation.

7. Policy should enable teachers to participate in activities that lead to the creation and transfer of professional knowledge (Bangs & Frost, 2012, p. 40).

The growing field of research and professional consensus attests to the importance of teacher voice, individual and collective, as a central tenet in the teaching profession and educational change efforts. These recommendations stem from a 17-country theoretical and qualitative study of teachers and officials from a sample of teacher organizations. Evidence from the study shows teachers' strong desire to take an active part in determining teacher policy, and research supports the notion that if teachers are enabled and supported, they have both the "appetite" and capability to take an active role in shaping their professional community (Bangs & Frost, 2012).

There is demonstrable and growing consensus amongst global policy organizations of the importance teachers, their motivation, to join and remain in the profession, and the key role that working conditions play in sustaining commitment. The value of teacher voice and engagement in both peer, school-level, and system-wide professional working also feature. This forward momentum is heartening and demonstrates at least a global-level commitment to and potential for change and improvement for the working lives of teachers. However, even jurisdictions that demonstrate the will to construct conditions that motivate and retain teachers will face daunting system-level economic and human resource constraints.

## Trends from Academic Research

A recurring theme in the commissioned research into teacher recruitment, development, and retention is the role of teacher motivation throughout the career path of a teacher. Research and advocacy reports, as highlighted above, and academic research are creating an evidence base and political demand for a more nuanced understanding and intervention to support teachers. Marking new, more refined, and more complex territory, these studies are providing policy makers, practitioner,s and researchers with much food (and evidence) for thought on how they can practically address the teacher-related challenges and opportunities of the day.

Traditionally, teacher-focused reform efforts often strive to employ techniques and strategies to influence external motivation drivers such as pay or career-ladder structures. Strategies are often designed to entice teachers to join the profession, pursue professional development, and remain in their school or system-level roles. Increasingly, research evidence points to powerful factors that may be more intrinsic in nature and those that increase teachers' feelings of efficacy and satisfaction with their practice. However, internal motivation does not necessarily mean that the motivation derives solely from within oneself. Rather, it is influenced by individuals' perceptions of and reactions to the nature of the work itself. For teaching, it appears to be heavily influenced by the contexts and conditions in which teachers work. School, district, and national-level leadership may influence these factors in a variety of ways.

Throughout the aforementioned research and reports, teacher recruitment, development, and retention have been linked to a series of different, yet related, concepts including motivation, self-efficacy, autonomy, and professionalization. Various models and conceptions of these issues and their linked relationships have emerged over the last decade. Research on motivation and recruitment provides an overview of intrinsic, extrinsic, and altruistic motivations as the most prominent rationales for entering the teaching profession. The review further considers how motivation relates to retention, with a discussion of the different motivational systems (ability-evaluative, moral responsibility, and task-mastery) that appear to drive teachers. Thoonen and colleagues (2011) proffer that motivation is related to self-efficacy, commitment to school goals, acceptance of incentives, and wellbeing. As such, the complicated and oft difficult to disentangle relationship between teacher motivation and work and professional conditions within which they operate is illustrated. Throughout the review, we will present evidence to examine each concept. However, we will attempt to illustrate how the concepts relate to each other. In conclusion, we will set out how the review of the academic and global policy literature informed our overall design, thinking, and analysis.

### Motivation, recruitment, and retention

The OECD teacher motivation research and implications report (OECD, 2015) clearly outlines the merit of a nuanced and prioritized consideration of teacher motivation. Teacher motivation is not only a means towards improving educational outcomes, but it is also in and of itself a valuable educational resource that is linked positively to teacher wellbeing (Zee & Koomen, 2016), and ultimately teachers' professional success.

The relationship between motivation and commitment is explored through two forms of commitment: organizational and occupational/professional. The research on motivation and commitment suggests that environmental factors (autonomy, relationships with stakeholders) rather than personal factors may ultimately be the most influential in the working lives of teachers. The review goes on to discuss the interplay between teacher self-efficacy, belief in one's ability to succeed, and commitment (Bogler & Somech, 2004; Chan et al.,

2008; Wu & Short, 1996). The literature review also demonstrates that teacher motivation is frequently linked with continued professional learning and a personal belief in one's ability to succeed.

Intrinsic, extrinsic, and altruistic motivations are seen as the most important reasons for entering teaching (Watt & Richardson, 2008). Intrinsic motivation is classically defined as "those behaviors that are motivated by the underlying need for competence and self-determination" and are "performed in the absence of any apparent external contingency" (Deci & Ryan, 1980). Extrinsic motivation evolves when tasks are attempted to achieve an external outcome (Ryan & Deci, 2000). Altruistic motivation, at least concerning teachers, includes the desire to work with young people and to be of service (see Yong, 1995). Motivation to enter teaching is influenced by different factors, as suggested by Watt and Richardson (2008). Watt and Richardson (2008) also suggest that different types of teachers may have different motivations. Highly engaged "persisters"—those teachers who intend to spend their whole careers in teaching—are motivated by a passion for teaching as well as taking on a career that allows them to meet their professional goals without sacrificing family life. This may vary from primary to secondary-level education. Interestingly, motivation to enter teaching also varies by geographic context. While the most frequently cited reason for choosing teaching is the desire to work with children and adolescents (OECD, 2005), research in different sociocultural contexts, particularly in developing nations, indicates that extrinsic motivation such as salary and career status plays an important role (Watt & Richardson, 2008). Watt and Richardson (2008) also indicate that generational differences may influence initial motivation, as newer generations of teachers may have different career aspirations and motivations than prior generations.

On the job, motivation also influences teachers' work. Teachers are thought to select and pursue specific goals because attainment of the particular goals implies something desirable about themselves (Ames & Ames, 1984). Along these lines, Ames and Ames (1984) define three motivational systems for teachers: *ability-evaluative motivational systems*, which suggest that teachers are motivated by protection of their own self-esteem and self-concept of their teaching ability and will select actions that either bolster their self-esteem or guard against a loss of it; *moral responsibility motivational systems,* which suggest that concern for student welfare is the most important consideration; and *task-mastery motivational systems,* which suggest that a teacher's first concern is student mastery. Such motivational systems are possibly impacted by both situational and individual factors. While these forms of motivation combine aspects of internal, external, and perhaps even altruistic motivation, Johnson (1986) notes that "teachers regard professional efficacy, not money, as the primary motivator in their work" and that indeed there is some evidence "that the prospect of extrinsic rewards may diminish the potency of intrinsic rewards for them" (p.55). The research on motivation points to the critical understanding that most teachers need a sense of personal accomplishment if they are to remain in the job.

### Autonomy

The research on both motivation and commitment suggests that environmental factors may ultimately be the most influential. Traditional hygiene factors (Hertzberg, 1959) such as salary (Coladarci, 1992; Day & Gu, 2009; Johnson, 1986) and the personal qualities people bring with them to work (Dumay & Galand, 2012; Rosenholtz, 1989) appear to be less important than how teachers' work is organized in schools. Teachers continue to value autonomy in the classroom (Firestone & Pennell, 1993; Firestone & Rosenblum, 1988; Rosenholtz, 1989), yet when autonomy is gained in isolation from colleagues, teachers may feel less obligated to pursue the interests and values of the organization (Firestone & Pennell, 1993). Autonomy may be less important when other conditions fostering commitment are present. These conditions include strong relationships with a variety of stakeholders and high personal and collective teacher efficacy. Teachers who are satisfied with their opportunities to develop and hone their skills and knowledge and also are content with the income and status associated with their job are at less risk of attrition (Fresko, Kfir, & Nasser, 1997).

### Professionalization

Various definitions of professionalization exist ranging from more traditional prescriptive versions calling for codes of conduct, representative professional bodies, and assessed and theoretically derived knowledge and skills (Whitty 2006 citing Milerson 1964) to more recent concepts which appear to reflect what a jurisdiction requires and perceives at any given time (Whitty 2006 citing Hanlan 1998). In turn, Whitty provides a modern conception of democratic professionalism underpinned by a commitment to social justice and change that encapsulates demystification of practice; alliance-building across the sector; nurturing collaborative cultures; and collaboration across schools and the sector. Regardless of the definition, growing consensus accepts that perceptions and conceptions of professionalism are influenced by the time, place, and context (OECD, 2016). The OECD (2016) also suggests a helpful illustration of teacher professionalism comprised of three parts: autonomy related to decision-making about curriculum, resources and discipline; knowledge from both formal and informal learning and professional development; and peer networking including individual mentoring, peer feedback, and collaborative and networked professional development opportunities. Clearly, there are many different conceptions of professionalization. For the purposes of our work, we have deliberately adopted Whitty's approach to guide our attempt to understand how each jurisdiction is both attempting to understand and conceptualize teacher professionalism.

### Commitment

Teacher motivation is connected to both teacher commitment and teacher professional learning. That is to say, a certain level of teacher motivation is necessary for teachers not only to pursue particular lines of work in their classrooms, but to commit to their jobs and their schools and to persist in

professional development that keeps them engaged in their careers over the duration. Research indicates that "some mix of commitments to the organization, profession, and students is necessary for teachers to have the motivation to professionalize and pursue changes in their practice while coping with the complex demands these changes present" (Firestone & Pennell, 1993, p. 493).

Teacher commitment can be considered to be both organizational and occupational or professional. Both are used to describe the working conditions of teachers. Organizational commitment is generally defined as "the relative strength of an individual's identification with and involvement in a particular organization." It is characterized by at least three factors: "(a) a strong belief in and acceptance of the organization's goals and values; (b) a willingness to exert considerable effort on behalf of the organization; and (c) a strong desire to maintain membership in the organization" (Mowday, Porter, & Steers, 1982, p. 26). Teachers are often seen to be more highly motivated to improve their practice and remain in the profession when both their working and professional conditions generate positive feelings and motivation.

This definition has also been used with only slight modification to define occupational commitment (Chan et al., 2008). Definitions of professional commitment "have ranged from the extent to which one is engaged in carrying out the specific tasks in the present work environment to the degree of importance work plays in one's life" (Somech & Bogler, 2002, p. 557). Rosenholtz (1989, p. 422) employs both usages to define commitment as "the extent of their work investment, performance quality, satisfaction, attendance, and desire to remain in the profession." Understanding the process through which teachers commit to their school and the profession is important. Commitment is associated with student achievement and school effectiveness as well as with teacher retention (Dumay & Galand, 2012; Jo, 2014).

### Self-efficacy

Much of the commitment research focuses on teachers' self-efficacy. According to Coladarci (1992, p. 334),

> *a greater commitment to teaching would be expected among teachers who believe student achievement can be influenced through skillful instruction, who have confidence in their own ability to influence student achievement, and who assume personal responsibility for the level of student achievement they witness in their classrooms.*

Teacher efficacy is strongly associated with commitment (Bogler & Somech, 2004; Chan et al., 2008; Wu & Short, 1996). Teacher commitment depends on teachers' confidence in their professional practices and a concomitant belief that students can learn (Rosenholtz, 1989). Ross and Gray (2006, p. 182) define teacher efficacy as "a set of personal efficacy beliefs that refer to the specific domain of the teacher's professional behavior. Teacher efficacy refers to a teacher's expectation that he or she will be able to bring about student learning."

Self-efficacy inspired by Bandura (1989, p. 1176), is often defined,  as an "optimistic sense of personal efficacy' alongside the "speed of recovery of perceived self-efficacy from difficulty." Both angles are helpful when considering the implications for teachers' ongoing motivation and commitment. The concepts of motivation and efficacy are equally characterized as interdependent and mutually reinforcing. Tschannen-Moran and Woolfolk-Hoy (2001) suggest that teacher efficacy relates to persistence and resilience, instructional behavior, and teachers' sense of their capacities to affect student outcomes. Studies that aim to assess efficacy and professional learning frequently seek evidence of change in teaching practice and instruction and find that these elements are reciprocally reinforcing (Zee & Koomen, 2016). In other studies, efficacy and motivation are linked to job satisfaction and self-confidence and once again are mutually supportive (Schleicher, 2016; OECD, 2013). Some authors suggest that retention to the profession may also be used as a proxy measure for motivation and sense of efficacy (Skaalvik & Skaalvik, 2011).]

A teacher's self-efficacy is most likely linked to the individual's professional self-image. Further, teachers with high self-efficacy will perform functions beyond the formal and expected ones (Bogler & Somech, 2004). These understandings connect to the idea of motivation; as described earlier, a combination of internal and external factors motivates teachers to attempt to meet a variety of goals in their work.

Committed teachers are motivated by the desire to raise student achievement and to work collectively to improve practice. A growing body of research identifies collective efficacy as a lever for developing and sustaining commitment (Dumay & Galand, 2012). Collective teacher efficacy is "the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (Goddard, Hoy, & Hoy, 2000, p. 480). Collective efficacy can enhance self-efficacy, which in turn promotes commitment. In a meta-analysis of the commitment literature, Sun (2015) concludes that teacher commitment is influenced by a collaborative teacher community where peer pressure to perform well works in combination with established norms that prioritize collective values. Thus, teachers need a certain level of personal motivation to engage in their work, but ultimately a strong professional community is required to support teachers as they continue on in their careers.

## Professional learning

The literature also demonstrates that professional learning is viewed both as a way to build motivation and efficacy and also as a reflection of motivation demonstrated by willingness to continue to learn and refine practice. Early professional learning experiences, such as teacher preparation and induction and early career learning opportunities, are linked to retention in the profession and also help to establish both a sense of efficacy and an orientation to continued professional learning. These findings appear across sites and countries (Anthony & Ord, 2008; TALIS, 2013; Reeves, Ring & West, 2015). Moreover, ongoing collaborative professional learning connected to local contexts is viewed as absolutely critical to improved teaching and improved learning outcomes for students (Anderson & Mundy, 2014; Schleicher, 2016; Cordingley, 2015; Kennedy, 2016).

Further, relevance and connection to practice are essential for coherent and meaningful professional learning. Job-embedded learning focused on student learning and real problems of practice is found to be more powerful than disconnected professional development that is "laid on." A sense of shared purpose for learning and close linkages to the students, classroom, and school setting are key elements in professional learning (Schleicher, 2016; Timperley et al., 2007; Desimone, 2011).

## Wellbeing

The upswing in recent policy and research interest in wellbeing has not translated into a more cohesive or widely adopted definition of the term. There is little definitional coherence related to teacher wellbeing at the moment beyond an agreement that it is the subjective interpretation between the actual and desired state of work and life. McCallum and Price (2016) helpfully suggest:

> *Wellbeing is diverse and fluid respecting individual, family and community beliefs, values, experiences, culture, opportunities and contexts across time and change. It is something we all aim for, underpinned by positive notions, yet is unique to each of us and provides us with a sense of who we are which needs to be respected (p.17).*

Common to many conceptions of teacher wellbeing is a sense of personal satisfaction with the distribution of work and personal time and effort (Aelterman, Engels, Van Petegem & Cerhaeghe, 2007). Similarly, the concept of wellbeing is often referred to as highly subjective. Teacher wellbeing is also often juxtaposed within policy and research discussions of burnout, stress, and workload. Teacher wellbeing is often positively related to self-esteem and seen as an accelerant of teacher decisions to leave the profession efficacy (McCallum and Price, 2010; 2016).

We had not intended to feature wellbeing as a primary focus in our studies. However, based on the local system-level conversations with policy leaders during the course of our research, wellbeing continues to gain traction as both a policy and practice construct in some jurisdictions. For the purpose of this project, we included wellbeing as a question for policy leaders and present their reflections, however, we leave the overall review of wellbeing literature to a future publication.

**Conclusion**

Research exploring the sources of motivation that enhance the teaching profession remains a common thread. Similarly, research examining the shortage of qualified teachers often focuses on policy measures to support the recruitment and retention of high quality teachers and provides recommendations to improve the attractiveness of the teaching profession. Nuanced, yet scalable, approaches to supporting teachers throughout their career life course will only become more important as pressure mounts on governments and agencies to understand what motivates teachers to join the profession and develop into confident and committed teachers who choose to stay in the profession. However, it is one that remains in its infancy and requires continued evidence gathering, advocacy, and championing. These issues remained top of mind as our teams worked across six systems to learn more about their policy approaches to nurturing the teaching profession.

# Country, State/Province and District Level Studies

W**e set out to curate a set of jurisdictional studies that illustrate how diverse education systems create and sustain structures that influence the work and lives of teachers.** We are thankful and honored to work with researchers and colleagues in six jurisdictions to gather and review relevant policies and interview evidence from leading policy figures. In each system, colleagues have produced compelling studies and illuminated the challenges and opportunities facing education systems in their quests to secure their future education professionals. To simplify the presentation of the cases, we begin with country-level studies in alphabetical order: Jordan, Scotland, and Uganda. In turn, state/province-level studies of Uttar Pradesh (India) and Ontario (Canada) are followed by the district-level study of Shanghai (China). Based on the literature review and our established interview instrument we present each case in the following themes: state of the profession and the public educational discourse; education policy and strategy; teacher career paths, recruitment and retention; teacher motivation; and teacher professionalism. Each study concludes with final thoughts.

## Country-level Study 1: Jordan

The government of the Kingdom of Jordan (population 7.8 million) spends over 12 percent of its GDP on compulsory education for boys and girls aged 6 to 16 (Ministry of Education [MoE], 2006). At the end of grade 12, students passing the final exam are awarded the national General Secondary Education Certificate (Tawjihi). The Education Act of 1994 defined the tasks of the MoE as: establishing public education institutions and administering them; supervising private education institutions; providing appropriate school buildings; encouraging student activities and providing students with counseling and health care; encouraging scientific research; strengthening educational links between Jordan and other countries; establishing adult education centers; and reinforcing relationships with the community.

The MoE is responsible for the achievement of the general educational objectives in the kingdom. There are three governorates and 43 directorates throughout the kingdom. As of 2017, there are 3,793 public schools in Jordan including 2,617 elementary schools (kindergarten to grade 10) and 1,175 secondary schools (grades 11 and 12). In the 2016–17 academic year, there were 1,146,172 elementary students (kindergarten to 10), and 159,736 secondary students (11 to 12). There are 83,062 public school teachers with a student-teacher ratio between 7:1–28:1 depending on the directorate and the level.

Regional socio-economic and political pressures have heavily influenced the Jordanian education system. The education system has been faced with sudden student population increases coupled with multiple waves of policy and strategic change. Under the patronage of the royal family, partners, donors, and NGOs have intervened to support the MoE. The purpose of the MoE has

also been strategically redirected to enhance its focus on student learning and school improvement through a variety of initiatives. At this point, the MoE with its partners have developed several high-level national frameworks and policies that have incorporated international standards of quality teaching and learning. While the frameworks are in place, these directives have yet to be implemented, operationalized and institutionalized by the MoE, which is responsible for achieving key goals by 2025.

### State of the Profession and Public Educational Discourse

> *"It is worth noting that developing an integrated educational system requires full and swift implementation of existing programs and plans which are in line with best international standards and practices. It also requires the development of human resources according to a framework that ensures synergy between programs and goals."*

His Majesty King Abdullah II (NCHRD, 2015)

The royal leadership of Jordan supports and promotes teaching as a profession that is key to the development of the country. His Majesty King Abdullah II is vocal about the role of human resource development in achieving integrated economic and social development for the future of Jordan. Her Majesty Queen Rania Al Abdullah advocates for all Jordanian children to have access to stimulating classrooms and modern curricula (Queen Rania Foundation, 2017). This vision strives to connect Jordan's children to the world and the world to Jordan's children through excellent pedagogical practices of inspired teachers with access to technology in the classroom (Queen Rania Foundation, 2017). Several affiliated organizations work under the umbrella of the Queen Rania Foundation (www.qrf.jo) including the Jordan Education Initiative, Queen Rania Teacher Academy (QRTA), The Queen Rania Award for Excellence, Madrasati and Edraak (Queen Rania Foundation, 2017).

The education system in Jordan has undergone a number of changes over the last 20 years. In the early 2000s, Jordan's comparatively high TIMMS and PISA achievements were celebrated as evidence of a successful education system (Ababneh, Al-Tweissi & Abulibdeh, 2016). However, Jordan did not maintain this growth and achievement trajectory. The achievement plateau created alarm for policy and practice leaders. Interviewees indicated that, during this time, the status of the teaching profession declined as a result of domestic political situations in the broader region including the Arab uprising and instability within the Jordanian system. Throughout the interviews, leaders identify key conditions straining the education system and negatively influencing student learning outcomes including: national, regional and international economic issues where recessions created job loss; school overcrowding due to migration of private school students to public schools; an influx of refugees into the Jordanian public education system; and perceived instability of leadership within the MoE.

**Education Policy and Strategy**

The MoE Act of 1994 (International Labor Organization, 2017) outlined the basic education philosophy and objectives of the Jordanian education system to include: the values of Islam; the belief in the ideals of an Arab nation; the support for the "Palestinian cause"; a balance between national and Islamic principles and openness to other "universal cultures"; and respect of individual liberty and dignity. The MoE Act of 1994 set forth the basic curricula for kindergarten through secondary education and provided regulations governing MoE staff, teachers, and school leaders.

In 2006, the MoE launched the National Education Strategy (NES) in conjunction with a national socio-economic reform program to promote human resource development in Jordan. The aim of the NES was to develop competitive human resource systems that could provide all people with lifelong learning experiences relevant to their current and future needs. This responsive program would strive to stimulate sustained economic development through an educated population and a skilled workforce to achieve and sustain a knowledge economy.

The NES also intends to modernize teaching and learning programs and practices. A key NES implementation strategy is to transform the education system governance from a traditional, centralized system to one that is decentralized (Best et al., 2013). The intended goal is a system that is collaborative and attentive to learning processes and subject matter outcomes. This paradigm shift in organizational management is intended to promote the personalization of educational opportunities to meet the needs of students and local communities.

In 2016, the *National Human Resources Development Strategy* (NHRDS) was launched with a set of goals for 2025. Among other purposes, the NHRDS was designed to guide MoE operations throughout the implementation of annual development activities. The strategy enables the MoE to ensure that by 2025 the following goals will be achieved:

- all children have access to quality early childhood learning and development experiences;

- all children complete equitable quality primary and secondary education;

- a greater number of youth and adults have relevant technical and vocational skills for employment; and

- all students have fair access to affordable, relevant, and quality university education opportunities.

These policies strive to improve an education system that is strained by current and ongoing regional refugee crises. Jordan has an ongoing Palestinian refugee situation with over two million Palestinian refugees. According to the United Nations Relief and Works Agency (2013), Jordanian public schools were already serving seven in ten Palestinian refugee children outside the camps when the Syrian refugee crisis hit the region. According to Human Rights Watch (HRW, 2016), 226,000 out of 660,000 Syrians registered with the United Nations Refugee Agency (UNHCR) in Jordan are school-aged children aged between 5 and 17. Specifically, since the 2011 outbreak of conflict in Syria, Jordan's MoE has taken a number of steps to accommodate refugee educational needs including hiring new teachers; allowing free public school enrollment for Syrian children; and having second shifts at nearly 100 primary schools to create more classroom spaces. In 2016, notwithstanding these efforts, HRW reported that over 80,000 out of 226,000 children were not participating in formal education during their last school year. In that same year, the MoE announced the creation of 50,000 new public school places for Syrian children and to reach 25,000 out-of-school children with accredited "catch-up classes." Policy leaders shared how the international pressure on Jordan to accommodate all of the displaced children into the public school system is substantial — and the pressure on the education system is relentless on multiple levels.

### Teacher Career Paths, Recruitment, and Retention

Within Jordan, there have been multiple attempts to develop a clear career path for teachers. The MoE Act of 1994 attempted to establish a more clearly articulated career pathway. One key challenge in creating career paths is that the Civil Service Bureau (CSB), not the MoE is responsible for the recruitment and retention of teachers. The MoE has no authority to influence CSB decisions on the qualifications and characteristics to guide teacher recruitment. Graduates apply to CSB and wait until there is a vacancy. It is noteworthy that no other form of recruitment assessment or interview identifies qualified teacher applicants. The application for the Civil Service is the only selection process used. Once teacher candidates file their application, they may wait several years before being invited to fill a teacher vacancy. Once hired, novice teachers receive six to eight weeks of theory-based training with no classroom-based practicum. There is a widespread belief that this theory-based training is inadequate to prepare them to be teachers. There is an emerging program for pre-service education.

Once hired, teachers are ranked by an internal MoE-adopted system that takes academic qualifications, teaching experience, and in-service educational training certification into account. According to one interviewee with over 20 years' teaching experience, the system does not assess teachers based on their performance. This creates a system that demotivates high-performing teachers because all teachers will get promoted to a higher rank based on years of experience regardless of performance. In 2014, the MoE designed a subject-specific exam for novice teachers but did not take any action to

address those teachers who did not pass the exam. Hence, many teachers who did not pass the exam remained in the system, which created further frustration and disappointment for those individuals with hopes for promoting teacher quality assurance in Jordan. Most interviewees emphasize the importance of revisiting recruitment mechanisms to ensure a high degree of rigor. In particular, the QRTA Diploma program was often referred to as an example of a human resource success that should be further examined for wider implementation by policy leaders when considering new recruitment procedures.

In 2016, the MoE, with the support of UNESCO, released the National Teacher Policy and Strategic Framework 2016. The framework aims to develop the national standards and set up an institutional structure to improve the Civil Service Bureau procedures for hiring teachers. These different, yet linked, policies represent an attempt by the MoE to improve educator recruitment, career paths, performance-based evaluation, and retention. Interviewees share their hope that this suite of actions will positively influence Jordanian education quality and help to restore the social status that Jordanian teachers once enjoyed.

One of the most significant regulations related to elementary and secondary education in the kingdom is Regulation No. 59 of 1993 on Educational Certification and Training. This regulation concerns the establishment of a MoE Educational Certification and Training Committee responsible for the creation of committees specialized in training, conditions of those responsible for training courses, and the way financial rewards are given.

The MoE has worked to provide many opportunities for teachers to improve their skills and gain qualifications for better opportunities in Jordan and in the region. In addition, the MoE strives to provide teachers with many benefits that target their wellbeing, including low-interest loans, housing loans, higher education scholarships, and places at public universities for their children. The MoE has also revisited teachers' salaries during the past few years, and the basic salary for a novice teacher has increased to 447JD ($630 [USD]) a month. Teachers, like other government employees, benefit from social security in retirement, which means they follow the rules and regulations of the Social Security Corporation that dictates retirement age, early retirement and pensions. In addition, the MoE places a reasonable cap on teaching load in the 197-teaching day school year with the maximum teaching load set at 24 lessons per week per teacher. If the number of lessons exceeds 24, the teacher can get a financial bonus. The duration of one lesson is 45 minutes in a single-shift school and 40 minutes in the double-shift schools. The school day starts at 8am and finishes at 2:30pm in secondary schools. Finally, in 2011, the teachers' union was established to be the teachers' voice in Jordan. The union cooperates with the MoE to offer different benefits to teachers, such as loans and trips for Professional Development (PD) and pilgrimage (Omra) in addition to professional development opportunities. But, according to interviewees, teachers do not appreciate how the union affects policy.

**Teacher Motivation**

Interviewees share diverse opinions about the current health of the Jordanian teaching profession. However, all interviewees agree that the social perception of teachers significantly declined over the last 30 years. Leaders consistently emphasize the importance of raising the bar for graduates being accepted into education faculties to ensure teaching is not, as an interviewee shares, the "profession of the jobless." The decline in interest to become a teacher is often directly related to low wages in relation to other professions.

When leaders discuss motivation, they classify teachers into three groups:

**Teachers who join the profession because they do not have a better option.** A high percentage of the teachers who are in this group are male and/or had low achievement in high school or on the Tawjihi exam. These teachers are viewed to be demotivated even before entering the profession. They often leave the profession after two or three years, or as soon as they can find a better opportunity, such as teaching in a neighboring country with a better salary. Those who continue to teach in Jordan are perceived to mostly exhibit minimal input or effort.

**De-motivated teachers.** These teachers start their professional lives with motivation. They wanted to be active in the system and to contribute to their profession. However, these teachers lose their drive when faced with an education system that does not support them and where they are not invited to make system-based contributions. Teachers then perceive that they are not appreciated for what they are trying to accomplish in their classrooms and what they want to contribute to the system. Leaders suggest that many of these teachers struggle in the system while trying their best to stay positive. They demonstrate fluctuations in their performance.

**Motivated teachers.** Leaders believe that teachers in this group are passionate about teaching and learning and have consistent faith in their profession. They continually look for new challenges and new professional development opportunities regardless of the system. They are perceived to be the smallest of the three groups.

In a recent attempt to decentralize the system and build teacher competence, expertise, proficiency, and experience, the MoE opened channels with teachers to begin engaging in leadership opportunities and roles. Teachers are now involved in designing and evaluating textbooks and providing the MoE with feedback on the quality of the curriculum. While this is a substantial leap forward, there remains a persistent lack of career path-related clarity for in-service teachers when compared to pre-service teachers (see QRTA below). According to leaders interviewed, teachers claim they want to play a more substantial role in their profession and would like their voices to be heard beyond the Teachers' Union. As one interviewee explained, "apart from those teachers graduating from the QRTA, most teachers are unaware of anything in the system."

In 2016, Queen Rania launched the first national pre-service teacher training program at the QRTA with headquarters in Amman. According to policy leaders, the program offers teacher training that recognizes merit and passion in teachers and gives novices opportunities to practice and refine their teaching skills before entering the field. It is expected to motivate qualified and passionate graduates to become teachers. At first the CSB continued to handle the recruitment of novice teachers for this program, but the QRTA, in collaboration with MoE and the CSB, set higher standards for accepting teachers into the program.

Interviewees also commend the Queen Rania Award (QRA) and the *Proud to be a Teacher* initiatives. The QRA is intended to motivate teachers by honoring distinguished educators across the country symbolically and materially. Moreover, successful teachers are afforded international professional development opportunities. Some teachers work hard to win this prestigious award, believed to be one of the best things that can happen to them as teachers. In 2013, Madrasati launched the Proud to be a Teacher initiative to bring teachers together in leadership and team-building summer camps. These enable them to focus on their personal professional development by connecting positively with other education professionals. One policy leader shares how the colorful workspace, fun activities, and social aspect of the program emphasize the importance of making teachers happy and relaxed in their environment to promote success.

## Teacher Professionalism

The philosophy underpinning the Jordanian education system is based upon the Jordanian constitution, the Islamic Arab civilization, the principles of the Great Arab Revolt, and Jordanian national experience (NES). According to the NES, the role of the teacher is to be a facilitator and manager of individual learning. The MoE recognizes that understanding and improving the overall quality of teaching and acknowledging the changing role of the teacher will be critical to educational reform program success. Currently, the role of the teacher is shifting away from traditional approaches to being a learning facilitator and assessor who supports student progress given specified learning outcomes as dictated by the strategy. This evolution is happening while Jordanian classes are being flooded with refugee children who have gaps in their learning in addition to socio-emotional issues requiring a high-degree of personalization from teachers to support their extensive teaching and learning needs. As the Syrian refugee crisis expands, additional trauma-induced needs became notable and many international organizations in collaboration with QRTA have designed training program for teachers on how to deal with traumatized students. These additional demands on teachers require new knowledge, skills, attitudes, teacher preparation, and training to enhance their teaching skills. In order to achieve this elevated level of professional knowledge and behaviors, the national strategy identified a set of teacher standards, categorized into seven domains:

1. **Education in Jordan:** Demonstrates an understanding of foundations of the education system of Jordan, its major characteristics and its developmental trends.

2. **Academic and special:** pedagogical knowledge: Demonstrates understanding of content of the subjects that he/she teaches and its transformation into learnable forms.

3. **Planning for instruction:** Plans for effective instruction.

4. **Implementing instruction:** Implements effectively instructional plans.

5. **Assessment of students' learning and instruction:** Demonstrates understanding of strategies and techniques for assessing students' learning and their instruction and using them effectively.

6. **Self-development:** Uses accessible tools, means, and resources to develop himself/ herself professionally.

7. **Professional ethics:** Demonstrates professional ethics in his/her behavior and actions inside and outside school (Al Sheikh, 2006).

Given these demanding standards for professionalism, it is noteworthy that the interviewees consistently identified female teachers as being generally more professional than male teachers. Accordingly, interviewees suggest that teacher-training programs should be revisited to address the specific needs of male teachers and the type of programs and/or support that will motivate them. Focus on leadership, parent/community relations, and policy dialogue are driven by the NHDS.

**Teacher Wellbeing**

Throughout the past 30 years, the Jordanian government has emphasized the role of teachers in improving learning outcomes across the education system. The stress of continual changes in an increasingly complex environment is coupled with a teaching profession that often receives little support and recognition. The interview data confirm that both issues are problematic in Jordan. A recent teacher motivation survey found that in general, teachers love their profession. Given the opportunity, they would choose teaching as a profession again. Teacher challenges are rooted in the negative societal perception of education, poor salaries, lack of school-level resources, lack of recognition, lack of job satisfaction, and insufficient teacher preparation. Teachers also describe having limited opportunities to participate in the decision-making that affects their profession.

These issues are so significant within the sector that interviewees address teacher wellbeing in terms of professional recognition and respect. Participating leaders believe that for Jordanian teachers, professional recognition is tied to their sense of self, which is often influenced by their own desires to be perceived as a professional teacher who is respected within the community. This is perhaps why the QRA and official certification (see below) were consistently referenced as being important to the profession and teacher wellbeing.

In 2005, the Association of Queen Rania Al Abdullah Award for Excellence in Education was instituted by a royal initiative to spotlight the importance of quality educators essential for the development of the nation. The main message from leaders is the need to prioritize honoring educators. This entails motivating the distinguished teachers among them, disseminating the culture of excellence and creativity, and contributing to knowledge creation. This royal recognition by way of the awards is highly appreciated by teachers, especially because the QRA's marketing campaign has reached Jordanians across the entire country and promoted the idea that there are excellent teachers in the system. In addition, policy leaders state that teachers appreciate the award because it permits them to self-assess, self-nominate, and consider opportunities for improvement. They also indicate that they achieve the self-confidence to play mentoring roles for their colleagues.

Interviewees also return to a fundamental belief that the wellbeing of professional teachers is deteriorating because of the lack of a mandatory teacher certification system. They stress that the problem is significant for teachers who are not School of Education graduates or subject-specific teachers assigned to teach grades four to twelve. The interviewees indicate that developing an in-service teacher certification and licensing policy boosts teachers' sense of professionalism and wellbeing as *recognized* teachers. Specifically, they are proposing a clear career path where teachers will be required to participate in different training programs for a minimum number of hours prior to applying for a certificate. It is noteworthy that this is exclusively for practicing teachers in the system. Once the diploma program is implemented, the qualifications for pre-service teachers should be addressed.

### Final Thoughts

In the recent past, Jordan has invested substantial energy and resources in the educational system to produce qualified graduates for a knowledge economy. In 2006, the NES was released with a mission to create and administer an educational system based on excellence. The international assessment results of that time period were celebrated as evidence of success. Since then, there have not been significant gains and the education system has failed to meet the expectations of sustained improvement. Many social, political, and economic factors have played a role in this decline. Still, the main challenge remains that stakeholders, partners, and donors believe that the MoE needs to address teacher recognition, certification, and voice. The MoE is working with several partners and NGOs to move this agenda forward.

However, these well-intentioned policy-based efforts need to be meaningfully implemented on a national scale in order to change society's perception of the teaching profession. At this point, the system is strained and will continue to be strained by local, regional, and international expectations that Jordan should improve its own education system while accommodating a large influx of refugee children. The teachers will be the on-the-ground professionals who will need to absorb improvements demanded by the new policies as they are implemented at the classroom level. Given the current recruitment, certification, and training needs, Jordan will need to continue to focus on system-level changes to support and retain qualified teachers who will work through these challenges.

## Country-level Study 2: Scotland

Scotland is bounded to the south by England and surrounded by the North Sea and the Atlantic Ocean. It has a large number of islands, mainly off the west coast. Scotland makes up a third of the United Kingdom's mainland. Its population is 5.4 million (National Records of Scotland, 2017) and 80 percent (ONS, 2011) live in urban areas, across 32 local authorities. Nationally, Scotland has 2,524 state schools, with 2,031 primary, 359 secondary, and 141 special schools (National Statistics, 2016). Rural schools comprise 34 percent, or 865 schools. The Scottish national education budget is £3.8bn ($4.9bn [USD]) equating to between £4,433 ($5,743 [USD]) and £10,821 ($14,020 [USD]) per student dependent on the local authority (Audit Scotland, 2014). As of September 2016, the school pupil population was 684,415 with 396,697 primary, 280,983 secondary and 6,735 special students. Pupils start school aged between 4½ and 5½. Students attend primary school (P1 to P7) for seven years and then complete six years of secondary school (S1 to S6). In S4, students can legally leave school at age 16.

The majority of students in Scotland identify as white Scottish (81.2 percent), with smaller numbers identifying as white other (7.9 percent), white Polish (1.9 percent), Asian Pakistani (1.9 percent), and mixed (1.2 percent). English is the primary language of instruction, although Scottish Gaelic, which has become increasingly popular, was taught to 10,215 students in 2016 (National Statistics, 2016).

All teachers in Scotland must be registered members of and annually accredited by the General Teaching Council for Scotland (GTCS) to teach in state and independent schools. There are currently 50,970 registered teachers in publicly funded schools across the country in primary (23,920), secondary (22,957), and special schools (1,869) (National Statistics, 2016). The average age of teachers in state-funded schools is 41, with teachers 55 years of age and older comprising 16 percent of the teacher workforce. Overall, 77 percent of teachers in Scotland are female, representing 91 percent of primary, 65

percent of secondary, and 76 percent of special school teachers. The education profession is comprised of 4 percent headteachers (79 percent female), 5 percent deputies (73 percent female), 15 percent principal teachers (69 percent female), and 76 percent teachers (79 percent female). Ethnic minority populations are under-represented in the teaching profession, with 1.3 percent of teachers identifying themselves as from ethnic minority backgrounds, compared with 5 percent of the population.

This study combines a systematic review of major Scottish educational policies over the last 20 years with ten in-depth interviews with key stakeholders from across the education systems, including national and local government officials, teacher and leadership union representatives. The study examines the current state of the teaching profession via the overall structure and systems that support the working lives of teachers.

## State of the Profession and the Public Educational Discourse

*"The strength of system is that we are small. Organizations are aligned. It has a good model of collegiate working and it [the education system] is built on consensus."*

The Scottish education system is highly regarded internationally. In 2007, the OECD recognized Scotland's provision of world-class initial teacher education (ITE) (Scottish Executive Education Department, 2007). In 2014, the Office for National Statistics (ONS) found that Scotland was the most highly educated country in Europe. It was among the most well educated globally based on tertiary education attainment, even above countries like Finland, with approximately 40 percent of the Scottish population aged 16 to 64 educated at National Vocational Qualification (NVQ) Level 4 and above.

Scotland has a "truly comprehensive system" in which schools do not select students on the basis of their prior academic achievement, a fact that all policy leaders shared with pride and passion. In Scotland, each of the 32 local authorities directly employs teachers and headteachers, who are considered officers of the local authority. According to policy leaders, this structural and contractual fabric provides strength within the system and allows for high levels of trust and collaboration as strong relationships are formed across a range of actors. Teachers have high levels of job security in that they are held to account through the professional teaching standards of the GTCS, whereby accountability is seen, in the first instance, through a professional development lens.

The "small" size of Scotland was identified by policy leaders as a strength that allows for greater collaboration as "the same people sitting round the table" at various strategic meetings. As one policy leader notes, "The strength of system is that we are small. Organizations are aligned. It has a good model of collegiate working and it [the education system] is built on consensus."

Policy leaders interviewed express their "pride" in the organizations and agencies that comprise the greater education sector in Scotland. The GTCS receives special mention by leaders for its provision of an "assurance of quality" to the profession and the wider public. Leaders describe GTCS as a demonstration of a "professionally committed, well qualified, updated, upskilled" workforce with "high professionalism" that is "promoting quality."

Public perceptions of teachers and the education system are reportedly positive. However, leaders describe how teachers currently feel at a "low ebb," mainly due to workload issues. Teacher shortages exist in key secondary subject areas, and there is an intense focus on education in the media based on national prioritization of education and educational improvement. Recent PISA-related coverage has often centered on the perceived failings of the education system. Interestingly, there was a calm consensus among policy and organizational leaders that the system is moving in the right direction to address concerns and is on a path for continuous improvement. One policy leader shares their concerns that "education in general is becoming ever more politicized" and that policies are still occasionally generated as "knee-jerk political madness." This sentiment, to varying degrees, was echoed by several policy leaders.

Policy leaders share how the intense public scrutiny of the education system intensified when the First Minister of Scotland, Nicola Sturgeon, publically stated that she wished to be judged by her record on education: "Let me be clear, I want to be judged on this [education]." One policy leader states that these "bold statements" serve to "change the intensity" of educational discussion across the country. Another comments how "the government was writing the narrative" that legitimized and increased scrutiny on all aspects of the system. In turn, these conditions led to an increase in educational policy actions to drive up standards and created a cascading effect of increased accountability at various levels of the system and, with it, increased teacher workloads. This perceived legitimization of a more negative narrative allowed for a more intense scrutiny by the media and political parties. In turn, from 2007–15, public opinion polls (The Scottish Government, 2016) captured an increase from 12 to 22 percent in members of the public believing that government should be "improving standards in education."

In 2015, the Scottish PISA results, lower in reading, math and science than in 2012, and dropping to be in line with the OECD average, intensified this internal scrutiny following a fall in Scottish outcomes (The Scottish Government, 2015). The public narrative of the failings emerged as that of a system that needs to be fixed. In turn, this led to a governance review, published in June 2017, entitled *Education governance next steps: empowering teachers, parents and communities to deliver excellence and equity for our children (*The Scottish Government, 2017). Some policy leaders suggest that the review and its publication have provided an opportunity for the government to create a different narrative and highlight the positives in the system within an ongoing increasingly public chronicle of a 'failing' system portrayed and perceived to be failing and that needed to be fixed.

Many policy leaders identify the need for a more generalized public narrative about education in Scotland at a professional as well as a political level. From within the profession, teaching needs to be promoted in a more positive light. This negative narrative is reflected by the statistic that 54 percent of teachers (Educational Institute of Scotland (EIS), 2017) would not recommend teaching as a positive career choice.

Overall, Scottish education system strengths lie in the collaborative nature of relationships between system-level organizations and the collective work to develop the system. All policy leaders reiterate their personally and professionally positive views of the national-level collaboration which cascades down to schools, for example into school-level working-time agreements. These define contractual arrangements for teachers each year, including training and meeting allocations. There are concerns that the overall discourse within education needs to change to make the teaching profession more desirable for potential teachers to join and commit to remaining in the profession.

**Education Policy and Strategy**

> *"Scotland has its ducks in a row."*

Scottish education policy, described by one policy leader as "having its ducks in a row," reflects a coherent and clear strategy that has been designed collaboratively over the last two decades. Policy leaders consistently regard the coherence as a strength of the system. There was an underlying worry among interviewees that the current shift in the intensity of policy scrutiny and the recent governance review were moving education into "dangerous territory" by changing the narrative of Scottish education from collaborative in nature to one of a blame culture. Leaders highlight the key policies shaping the educational landscape and the working lives of teachers as the Teaching Council (Scotland) Act, the McCrone Agreement, Curriculum for Excellence and Teaching Scotland's Future.

**The Teaching Council (Scotland) Act (1965).** Following concerns that unqualified teachers and entry requirements had lowered, the Teaching Council Act established the foundations for one of the world's first teaching councils. In 2012, the GTCS was granted independent status by the government. The GTCS is seen as a strength in the system and one that all policy leaders speak highly of, whereby a key requirement of teachers is that they are qualified and registered with the GTCS.

***The McCrone agreement: A teaching profession for the 21st century (2001).*** The McCrone agreement is recognized, as one policy leader states, as having "forced the professionalism agenda" by focusing on teachers' pay and conditions and the core strengths of the current Scottish education system. The McCrone Agreement reinforced the importance of professional development and the role of the GTCS. The Scottish Negotiating Committee

for Teachers (SNCT), a tripartite body comprising teaching organizations, local authorities, and the Scottish government, sets out the pay and structure for teachers and teacher and leader career paths. These nationally set SNCT conditions are developed and agreed through working-time agreements in schools and overseen by the Local Negotiating Committee for Teachers (LNCT) to ensure that the SNCT principles are implemented and applied.

Additionally, The McCrone Agreement requires teachers to continue to develop and improve their skills throughout their career beyond initial teacher education (ITE). The agreement states that: teachers must commit to ongoing professional expertise through continuous professional development (CPD). Teachers must undertake an additional annual 35 contractual hours of recognized personal professional development, whereby teachers engage and stimulate their thinking and professional knowledge, through, for example, focused professional reading and research, work-shadowing and attending conferences (GTCS, 2017b). Teachers agree an annual CPD plan with their managers and keep an individual CPD log (The McCrone Agreement, 2001). Likewise, employers are responsible for organizing and paying for teacher CPD opportunities that must be discharged during contractual working time and annually agreed with schools and reviewed by local authorities.

In 2003, the McCrone Agreement also introduced the qualification-based grade of "chartered teacher." This role focused on enhancing and recognizing professional practice and effectiveness in teaching and learning. It also allowed teachers to continue to teach in schools and rewarded quality teaching while stretching teachers to develop further. Chartered teachers, once accredited, were registered with the GTCS, and having completed modules, they would receive pay increments. There were many criticisms of the system, including that headteachers would not know who was a chartered teacher in their school and that teachers could self-select to become chartered. However, there was agreement that the status enabled teachers to remain in the classroom, and develop professionally and take on responsibilities beyond their classroom roles. In 2010, as a result of the aforementioned challenges and the global financial crisis and austerity measures, the status was discontinued.

The 2002 National Debate on Education (The Scottish Executive, 2002) resulted in the design and implementation of A Curriculum for Excellence (CfE) in 2010–11 (The Scottish Government, 2004). The implementation was overseen by Education Scotland, the executive agency of the Scottish government tasked with improving the quality of Scottish education. The document was intended to serve as a new curriculum for schools that would enable young people to become successful learners, confident individuals, responsible citizens, and effective contributors. Initially, the new curriculum was met with great anticipation. However, the challenges of implementation it posed for teachers, schools, and the wider education system have led to considerable challenges. The criticism across the range of policy actors, centered on the vague nature of the outcomes and experiences, the limited support available for the roll-out of the program, and the disconnection

between the qualifications with the overall Scottish Qualifications Authority (SQA). Policy leaders believe that these elements of the curriculum have led, ultimately, to increased teacher workloads.

In 2010, a review of teacher education entitled *Teaching Scotland's future* identified 50 recommendations for educational improvement (Donaldson, 2011). Some of the key adopted recommendations included discontinuing the chartered teacher status and the creation of the teachers' professional update. Since 2014, teachers have mandatorily engaged in the professional update process through the GTCS, with the aim of helping plan teachers' professional learning by asking "deep questions about knowledge, skills, understanding, and professional practice. The self-evaluation enables teachers to identify strengths and areas for development, focus on areas for developing expertise, and consider career planning" (GTCS, 2017a). Completed in conjunction with the professional CPD log, the update is reviewed every five years with a manager from the teacher's school. Although it is in its infancy, many policy leaders see the professional update as a positive step to ensuring increased recognition of the importance of professional learning and motivation in the teaching profession.

In June 2017, at the time of data collection for this study, the Scottish national governance review, *Education governance next steps — empowering teachers, parents and communities to deliver excellence and equity for our children,* was published (The Scottish Government, 2017). Overall, the recommendations of the governance review set out intentions to bring educational policy closer to the teacher by giving greater autonomy to headteachers via direct-to-school funding arrangements. Policy leaders acknowledge that it is too early to know what the precise legislation will look like following the forthcoming negotiations and subsequent legislation discussions. One policy leader comments that there "were surprises in there." Another policy leader identifies that many of the existing support structures and systems are being reconfigured, which has the effect of "shaking the snow globe" of education in Scotland. The prevalent worry is that the changes have the potential to destabilize the Scottish education system. This governance review, and its intended outcomes, are felt by many participating policy leaders as a weakening of well-established national and local-level support structures, with potential deleterious knock-on effects for teachers.

**Teacher Career Paths, Recruitment and Retention**

*"80 percent of primary teachers will never be promoted."*

In Scotland, local authorities hold the statutory duty for public education expenditure, including the recruitment and deployment of teachers. Teacher retention in Scotland is not seen by policy leaders as an immediate issue, although in a survey by one teaching union, 62 percent of teachers considered leaving the profession altogether (NASUWT, 2016). Between 2010 and 2014

total teacher numbers (including ELC, primary, secondary, special and centrally employed teachers) across all publicly funded schools in Scotland decreased, before stabilizing in 2015 and increasing in 2016. In 2016, 20 local authorities saw the number of teachers maintained or increased (by a maximum of eight per cent), whilst twelve local authorities saw a decrease this year (by a maximum of two percent) (Teacher Census, 2016). However, teacher recruitment is becoming an incredibly pressing matter, specifically in art, business education, chemistry, computing, English, Gaelic, home economics, mathematics, modern languages, physics, technological education, primary, and primary with Gaelic medium (Scottish Government and the Convention of Scottish Local Authorities, 2016).

Remote and rural locations in Scotland also experience greater difficulties in recruiting teachers. Conversely, urban and oil/gas industry proximity-related cost-of-living increases, especially in Aberdeen, create a lack of affordable housing and deter people from relocating solely for work. The Highlands council notes the demographic challenges linked to an increasing aging population and a decreasing working-age population, raised similar issues (Scottish Government and the Convention of Scottish Local Authorities, 2016). There are concerns, in some local authorities, that with a predominantly young female workforce, they may not be able to replace teachers on maternity leave.

Policy leaders comment that "traditional routes [into teaching] are not working" and that incoming teachers are no longer looking for a lifetime career. Policy leaders are mindful of the need to get better at understanding and anticipating the millennial generation. One policy leader suggests that they should "take pay off the table" and "give everyone an uplift" in salary, which would then allow the focus to shift to the core work of teachers and schools. Further, one policy leader describes the difficulties in trying recruit and plan for teachers:

It is notoriously difficult to see into the future (and predict recruitment patterns). It's like driving a car and having the windows blacked out in front and one can only judge where one is going by looking out the back window and what happened in the past.

Supply teachers, employed by local authorities, play an important role in education provision by addressing shortages and freeing staff to undertake school-based professional development activities. Recently, 13 out of 22 local authorities raised the issue of teacher supply shortages (Scottish Government and the Convention of Scottish Local Authorities, 2016). To encourage an increase in available supply teachers, some local authorities employ supply teachers on permanent contracts to be deployed anywhere in the local authority as needed.

To alleviate these challenges, local authorities are developing innovative ways to recruit teachers, including access programs to support career changes. These are highlighted in the Scottish Government and the Convention of Scottish Local Authorities (2016) review of teacher shortages where, for example, the Distance Learning Initial Teacher Education (DLite) program aims to attract degree holders to undertake a distance-learning facilitated Post Graduate Diploma in Education (PGDE). Local authorities are also launching "Grow your own projects", an opportunity for redundant (i.e., unemployed former) oil service workers to retrain as secondary teachers; although, according to policy leaders, this is being used by schools to train teaching assistants to become teachers. Local authorities are also engaging retired teachers to take temporary, supply/substitute roles and supporting them with GTCS registration and professional update. Relocation packages, including probationer waiver payments, and the procurement of accommodation, are also on offer.

Scottish teachers are guaranteed paid employment and access to a learning mentor in school for their first year (known as the probationary year) after qualifying as a teacher. This support is seen by policy leaders as a clear incentive to join and remain in the profession. Although there have been implementation issues, including teacher issues with the location of school assignments, it is widely regarded by policy leaders as a positive measure to recruit, retain, and also professionalize teachers.

The lack of teacher career promotion pathways is highlighted by one policy leader, who indicates that "80 percent of primary teachers will never be promoted." This narrative reflects the lack of career progression that is widely felt among the Scottish teaching profession. Following the removal of the chartered teacher scheme, the promotion structure is seen as flat, which creates what policy leaders perceive may be a potential recruitment issue. Upon completion of the compulsory probationary year, teachers are assigned to what is known as an "unprompted post." Following this, the next promotion step is to become a principal teacher and then move on to become a deputy and then a headteacher. Principal teacher is a promoted post with various role assignments, including the everyday running of the school, head of a department/faculty, and "guidance" position for the pastoral care of pupils and for assessment. This was not always the case. Until the McCrone Agreement, several different levels of teacher qualification or recognition existed within schools, including assistant teachers, assistant principal teachers, senior teachers, principal teachers, assistant headteachers, deputy headteachers, and headteachers (Anderson and Nixon, 2010). These have subsequently been flattened out.

The Scottish College for Educational Leadership (SCEL) is highly regarded by policy leaders and interviewees from across the Scottish education system. Similarly, SCEL has gained global recognition as home to innovative practice to support school leader learning. Not only does SCEL provide clear pathways for leadership development (SCEL, 2017a), but it has also been addressing

issues surrounding career paths by the development of the Teacher Leadership Program (SCEL, 2017b). The Teacher Leadership Program is committed to developing teaching and learning within schools and encouraging teachers to take on more leadership tasks outside the classroom. This program has been nationally developed and is seen by many as a way of keeping teachers motivated and preparing them for future leadership roles. The launch of the governance review document moves SCEL from being an independent organization to an operational unit within Education Scotland, which may influence their future work (The Scottish Government, 2017).

The professionalization of teaching is highlighted in the Scottish government's commitment to making it compulsory for newly appointed headteachers to hold a Masters-level qualification by 2020. This initiative is funded by the government. One policy leader comments that "some in the educational systems have seen this as a barrier to recruitment; however, this raises the bar of the profession and will increase recruitment into the profession."

### Teacher Motivation

*"The system has been flooded with material and policy."*

Teachers and the teaching profession are regarded highly by policy leaders, who describe them as being well motivated. Policy leaders identify the "moral purpose of teaching" as an explanation of why Scottish teachers do what they do and recognize that teachers are motivated to act in the best interest of pupils. One policy leader recognizes a shift in how teachers have come to see "professional learning as an entitlement" over the last decade and how that has increased teacher expectations of support and development. This shift is often linked to the increased professional status of teaching, the coherent support from professional bodies, and a mandatory and supported focus on professional development and learning. These elements of the Scottish education system are all commended by policy leaders for creating a motivated workforce and system, and for moving in a positive direction to achieve a motivated workforce.

Conversely, policy leaders highlight pay and accelerating teacher workload as barriers to both recruitment and sustained motivation while in the role. Workload issues relate, according to policy leaders, to numerous initiatives being poorly rolled out (e.g., *Curriculum for excellence*) and an ever-increasing accountability infrastructure dependent on measuring and reporting outcomes. One policy leader notes that "the system has been flooded with material and policy" that have increased "workload complexity."

Overall, policy leaders suggest that teachers have a degree of autonomy as developers of their own curriculum within the Scottish teaching profession. Leaders note an increasing policy focus on teachers' professional judgment instead of rigid assessment regimes. The SNCT sets out clear working

conditions and agreements that give teachers and the profession as a whole a sense of stability, control, and a voice in workload-related negotiations. One of the conditions that appears to support teachers and sustain their level of motivation is linked to the collaboratively and nationally agreed and locally applied teacher working terms and conditions. These working-time agreements include the proportionate allocation of tasks across the 35-hour week. Agreements also address: additional time for preparation and correction; parent and staff meetings; preparation of reports and records; forward planning; formal assessment; professional review and development; additional supervised pupil activity; and continuing professional development (Scottish Negotiating Council for Teachers, 2017).

But one policy leader acknowledges that, at times, the workload allocation process can be challenging over time. For example, "if a head teacher gave away far more in previous years, it would be hard to get it back." However, the strengths of a national agreement that is explicitly translated into a teacher's local working condition increases the likelihood that hours are clearly agreed and adhered to. Teachers are employed for 35 hours a week, with a maximum class contact time (22½ hours); a personal allowance for preparation and correction (7½ hours); and collegiate time (5 hours) with school-level agreed use. Collegiate time allows for greater collaboration within schools.

Policy leaders also make reference to the teacher induction scheme, as previously outlined, as a strategy to support teacher motivation. Following successful completion of the scheme, probationary teachers are eligible for full registration with the GTCS, having hopefully increased their commitment to the profession and developed their own personal sense of their professional roles and responsibilities during their first year.

**Teacher Professionalism**

> *"Narrative shifting to professionalizing teaching."*

All policy leaders voice that the "narrative [is] shifting to professionalizing teaching", whereby throughout the system professional development and learning are identified and embraced. Leaders' support for the movement of teaching "towards a Master's level profession to access professional learning" is linked to its role in ensuring a teacher cadre with strong ambition and continued development of the strength of the system. The move towards a research-based profession, through the professionalizing of teaching and the significant weight placed on the GTCS to oversee professional learning, was frequently articulated in both the policy review and policy leader interviews. Despite the previously mentioned recruitment pressures, leaders presented a coherent and strong opposition to fast-track teacher accreditation and professional learning programs which are not fully accredited through the GTCS.

The professionalism of the Scottish education system is underpinned by the GTCS, which anchors the system with its professional development pathways and standards. All routes into the teaching profession are accredited through the GTCS. Although issues have been raised by policy leaders and in Teaching Scotland future (2010) about a lack of consistency of ITE courses, the notion that one body, the GTCS, which oversees standards, oversees ITE programs and the professional standards of teachers and teachings is highly regarded by policy leaders.

The two routes into the teaching profession are delivered through degree-level ITE. Scotland has an undergraduate route in teaching leading to a Bachelor of Education (B.Ed.) degree or an undergraduate degree and then a one-year Post Graduate Diploma in Education (PGDE). ITE provision is reviewed and reaccredited by the GTCS, which also provides and checks off the eligibility for registration of those who gain qualifications.

The GTCS professional standards (GTCS, 2017b) are underpinned by the themes of values, sustainability, and leadership, whereby professional values are at the core of the standards. The professional standards cover the following themes:

- **professional values and personal commitment: social justice, integrity, trust and respect, and professional commitment;**

- **professional knowledge and understanding**: curriculum, education system and professional responsibilities, pedagogical theories and practice;

- **professional skills and abilities**: teaching and learning, classroom organization and management, pupil assessment, professional reflection, and communication (GTCS, 2017b).

Through GTCS membership, teachers are automatically given access to research articles, through an online academic library. This access underpins the collective determination to raise the professionalism of teachers and move towards a Masters-level and evidence-driven profession. On its own, these actions would not bring about the desired change; however, as professional learning is a requirement for all teachers in the system, this gives greater weight to the endeavor and a much greater likelihood of success. The launch of the professional update (GTCS, 2014) supports these efforts and highlights the importance of teachers engaging in professional learning, self-evaluating, and recording learning using the GTC professional standards. Similarly, SCEL-led teacher leadership opportunities provide an innovative opportunity for teachers to extend their professional learning while staying in the classroom. Policy leaders also view this program as an opportunity to develop leadership skills should teachers wish to move into promoted posts, such as principal teacher, deputy, and headteacher.

## Teacher Wellbeing

*"Workload tsunami."*

*"Classic question? What barriers are there for high quality professional learning? I can't get out of class."*

In Scotland, teacher wellbeing and wellness can be viewed statistically by the measure of teacher absenteeism. In 2014–15, Scottish primary and secondary schools lost 343,000 days lost to teacher illness. This equates to an average of 6.3 days per teacher, compared with 10.8 days per council employee (Audit Scotland, 2016). However, this does not tell the whole story. Policy leaders believe that Scottish teacher wellbeing challenges revolve around working long and excessive hours and chronic issues of workload that one policy leaders describes as a "workload tsunami." While one policy leader describes how "teaching is bloody hard work" and that teachers consistently "go above and beyond for young people," teacher wellbeing needs to be addressed to maintain a motivated and professional workforce. Policy leaders all identify teacher wellbeing as a priority issue that all of their organizations are attempting to tackle.

There is evidence that the Scottish education system is collectively attempting to tackle teacher wellbeing issues as a means to improve the retention and motivation of teachers by focusing on teacher workload. The SNCT attempts to control teacher workload through the 35-hour working week and discourages unnecessary bureaucracy, although teachers work beyond these contractual hours. Working-time agreements approved locally by schools and overseen by the LNCT require school negotiating committees to conclude written time-working agreements. These should inform targets and time and identify resources in school improvement plans. To develop best practice, examples of working-time agreements are published. Policy leaders see these agreements as a key strategy to combat excessive workload issues and support teacher wellbeing.

In 2013–14, to address workload and wellbeing in light of the CfE framework, a working group was set up called "the curriculum for excellence working group on tackling bureaucracy" (The Scottish Government, 2013). The recommendations of the report included tackling school-level bureaucracy through a collegiate approach; the effective use of local negotiating committees for teachers; Education Scotland to ensure its inspection teams challenge unnecessary bureaucracy and offer practical assistance; Education Scotland to work with teacher associations and the Association of Directors of Education in Scotland on a series of workshops; and the SQAs and local authorities to streamline verification procedures for the new qualifications.

This review also influenced the Pay and Conditions of Service Agreement (2015–17), and the resulting pay agreement secured a 1.5 percent pay uplift as well as actions on supply teachers and teacher workload (SNCT, 2015). The review highlights how tackling teacher workload challenges requires a pan-system effort. The document also defines excessive workload as "anything that makes it impossible for teaching staff to complete their duties within the 35-hour week" at school (SNCT, 2015).

Significantly, the review also highlights key principles in negotiating working-time agreements in schools. As such, it recommends acknowledging teachers' willingness and ability to conduct themselves in a professional manner and strive to continuously develop professionally. The review's recommendations also include: ensuring professional dialogue to manage workload; appropriate curriculum planning and agreed policy guidance; concise and relevant documentation; monitoring and reporting systems that are fit for purpose; and IT systems that support effective learning and teaching.

Wellbeing was framed by one policy leader as having the sense that "you are able to do your job comfortably, to lead learning and...lead your class and learning. Workload would affect that. Classic question? What barriers are there for high quality professional learning? I can't get out of class."

### Final Thoughts

The strength of the teaching profession in Scotland is evidenced, not only through the passion and pride with which policy leaders speak about teachers and the teaching profession, but also through the strong collaborative working conditions. One might argue that due to the legislative framework, collaboration and trust exist in the system. However, the system as a whole actively seeks to develop a positive working relationship among its many actors involved in education and the development of teachers. The certification and development of the teaching profession is clearly mandated through the GTCS and supported through clear national working agreements to support teacher professional development. The system is actively attempting to rectify recruitment and retention issues and is looking to innovatively increase the numbers of people joining the profession without reducing the standards required to be a teacher. The flatness of career pathways is an issue in the system, as the existing pathways do not provide the motivation for teachers to develop professionally. This was heightened through the withdrawal of the chartered teacher status. SCEL provides teachers with teacher leadership opportunities and fills part of the vacuum created by the removal of chartered teacher status in that it develops teachers professionally but does not financially reward them. Education policy leaders interviewed felt that the discourse surrounding teaching has been damaged due to the intense scrutiny that education is placed under at a political level and which in turn increases the workload and intensification of teaching. The system is taking active steps to understand and rectify issues related to teacher motivation and wellbeing by the creation of teacher workload working parties.

# Country-level Study 3: Uganda

Uganda has a population of approximately 38 million people and its major ethnic groups include the Baganda (16.5 percent), the Banyankole (9.6 percent), and the Basoga (8.8 percent) (Central Intelligence Agency [CIA], 2017). Uganda has one of the youngest populations in the world, with close to 50 percent of its population under 15 years old (CIA, 2017). The country is divided into 112 districts across four regions: northern, eastern, central, and western. Uganda provides four levels of education: non-compulsory preschool, seven years of compulsory primary (ages 6 to 12), four years of non-compulsory lower secondary (ages 13 to 16) and two years of non-compulsory advanced secondary (ages 16 to 18) (Ministry of Education and Sports, UNESCO — IIEP Pôle de Dakar, 2014). Based on 2016 data, Uganda has 6,798 pre-schools, 19,718 primary schools, and 3,070 (lower and advanced) secondary schools (Ministry of Education and Sports, 2016). Between 2002 and 2016, Uganda's net primary-level enrolment rate increased from 84.8 percent to 92.1 percent. During the same period, net secondary enrolment rates decreased from 16.7 percent to 14.0 percent (Ministry of Education and Sports, 2016).

The government of Uganda, in its *Vision 2040,* aspires to "change the country from a predominantly low income to a competitive upper-middle income country within 30 years" (Government of Uganda, 2013, p. iv). To realize this ambitious growth, the government articulates a strategy to address perceived human resource challenges by "emphasizing skilling of the youth with globally competitive skills" (Government of Uganda, 2013, p.6). The introduction of universal primary and lower secondary education has led to a rapid increase in the numbers of students enrolling in Ugandan schools. Uganda's successful rapid expansion of access has not been mirrored by a parallel increase in the quality of education delivery. The quality of education, overall, has remained low with many students not acquiring the minimum knowledge for their grade. This lack of annual student growth has come at a high cost to Uganda's education system as estimates suggest that "57 percent of resources devoted to primary education are inefficiently spent on repetition and dropout" (Ministry of Education and Sports, UNESCO — IIEP Pôle de Dakar, 2014, p. 20).

Although teachers play a crucial role in improving education standards, a recent Ministry of Education and Sports and UNESCO (2014) study illustrates that 59 percent of teachers would change their profession if they were given the opportunity. Equally worrisome, Ugandan teacher absenteeism is, at 30 percent, one of the highest in the world (Education Commission, 2016). The current evidence on teacher absenteeism in Uganda does not clarify the reasons why teachers are absent.

To address these concerns, the government of Uganda sought a cost-effective approach to improving teacher motivation at scale. Initially, the partnership started between the government of Uganda and STIR Education, a non-governmental organization that aims to develop a systematic approach to improving teacher motivation. In 2013, both parties quickly realized the critical role of the national teacher union (UNATU) as well-respected and trusted among teachers in Uganda. UNATU's structures are similar to the government structures at primary level. At secondary level, UNATU provides a decentralized teacher support system through a network of regional trainers. As UNATU regional trainers are responsible for teacher mentorship and support, the partnership with STIR was logical. As part of this partnership, STIR trains UNATU's regional trainers and government community-level officials, including coordinating center tutors (CCTs), to facilitate teacher collaboration within and between schools. The decision to train UNATU officials to facilitate teacher collaboration and empowerment closely aligns with both organizations' ongoing priorities. In addition, STIR engages district officials and UNATU leaders to ensure alignment with ongoing system policies and strategies. This shared work is focused on enabling teachers to experience "lightbulb" moments of seeing their children learn.

As part of the work, teachers meet on a monthly basis to collaboratively identify challenges and create innovations to improve education quality. In turn, teachers work in networks to developing creative solutions to improve their practice and assess the impact of these solutions to thereby improve teachers' intrinsic motivation by seeing their children learn. This process engages teachers in a powerful continuous cycle between teacher motivation, teaching practice, and student learning. STIR defines teacher motivation as the light bulb moment when a teacher recognizes impact on student learning and has developed innovative evaluation methods to assess teacher intrinsic motivation, including teacher surveys and behavioral data (such as time spent teaching, etc.) (Jeevan, 2017).

In addition, STIR works with district education officers and other key stakeholders to embed the model of collaborative teacher networks and ways of working deeply into Uganda's education system. What has been fundamental to this innovative partnership is the willingness of the Ugandan government and UNATU to think differently and create innovative opportunities to address motivation, moving from a twentieth century paradigm of "carrots and sticks" (i.e., extrinsic motivation factors) to a twenty-first century approach towards intrinsic motivation.

In this study, we combine a systematic review of major Ugandan education policies over the last 20 years with 12 in-depth interviews with key stakeholders from across the education system. These include government officials, teacher union representatives, and civil society stakeholders. The study examines the current state of the teaching profession via the overall structure and systems that support the working lives of teachers. The study also identifies opportunities to sustainably improve teacher motivation through the government of Uganda's innovative partnership with UNATU and STIR Education.

**State of the Profession and Public Educational Discourse**

*"Teachers and the government need to realize their mutual dependency, one can't do without the other, they rely on each other."*

Key Ugandan education stakeholders participating in the interviews believe that teaching is a noble profession and emphasize that teachers are role models for students. One leader describes a teacher as "someone who makes those in other professions, for example a student becomes a doctor, an engineer, or a pilot, and therefore teachers should be treasured." Several interviewees refer to the teaching profession as a "calling" and stress the psychological satisfaction a teacher derives from the act of teaching. Reflections on how teachers are motivated by the act of teaching and improvements in students' learning is illustrated by a policy leader, who describes that teachers "feel good when they see that their children are passing well, proceed, and end up being good pupils."

The introduction of universal primary and secondary education, however, has greatly increased the pressure on teachers and on the wider education system to effectively support teachers. First, rapid student enrolment increases without adequate teacher recruitment results in teachers facing large class sizes with challenging average pupil-teacher ratios in primary schools. In 2002, the pupil-teacher ratio in Ugandan public primary schools ranked at 56:1, which has since then only slightly decreased to 54:1 in 2016 (Ministry of Education and Sports, 2016). Second, teachers often lack resources that support good classroom performance. These include learning materials and consistent salary payments which influence their attitudes and motivation. Third, the majority of interview participants believe the profession struggles to attract high-performing new professionals due to low salaries and a lack of clear career pathways once they have entered the profession. One leader describes Uganda's teacher training structure as "survival of the fittest...[as] due to a lack of programs, many [teachers] graduated 20 years ago and never received any refresher course."

These challenges surrounding the teaching profession have influenced the public discourse related to teachers and the education system as a whole. As in many other countries, the current public perception of teaching may, in fact, influence the future generation of potential school-level educators. As one leader says, "Secondary school learners don't want to become teachers because they think they'll be poor." There is a commonly held belief that teachers in the past were more mature and therefore able to produce more highly performing students. This is perhaps not unexpected as the system became larger to accommodate access ambitions. Finally, the prevalent and widely held expectation for teachers to serve as role models for the next generation of Ugandan citizens has often influenced how teachers are represented publicly. For example, the Ugandan media regularly highlight successful teachers but also prominently discuss negative issues such as

sexual harassment of students by teachers. Media concern also focuses on chronic teacher absenteeism, which is characterized as a result of a lack of teacher commitment even though there might be systemic reasons complicating teacher attendance. These trends encapsulate the tension between expectations and reality across the Ugandan education system. One interviewee perhaps best illustrates the current media-generated juxtaposition of teachers as heroes or villains, arguing that "teachers are supposed to be role models; otherwise they poison the population."

A greater sense of mutual respect and interdependence between teachers, unions, and governments needs to be established. Working together across the sector will create synergies that can support teachers and the profession in reinvigorating their personal and professional commitment and motivation. As one interviewee shares, "One can't do without the other: they rely on each other," but too often different "stakeholders do not appreciate the efforts of the other."

**Education Policy and Strategy**

*"The idea is good, but the implementation is complicated."*

In 2004, Uganda launched its Education Sector Strategic Plan (Ministry of Education and Sports, 2004) that was then updated in 2008 (Ministry of Education and Sports, 2008) and 2010 (Ministry of Education and Sports, 2010). These strategic plans received financial support for their implementation from multilateral organizations, including the World Bank, the European Union, and the African Development Bank, as well from the governments of the Netherlands, Ireland, and Belgium.

Uganda's strategic plans were developed in the context of Uganda's long-term commitments to the international community and included the Millennium Development Goals (MDGs) and Education for All (EFA) goals. Both sets of goals place a strong focus on ensuring that boys and girls complete primary education. Compared to the 2004 Education Sector Plan, the 2008 Education Sector Strategic Plan focused more intently on teachers by "increasing the attractiveness of the teaching profession through the introduction of a scheme of service that creates a career ladder for teachers and school administrators" (Ministry of Education and Sports, 2008, p.4).

The key constraints of realizing the 2008 revised sector plan, according to Uganda's Ministry of Education and Sports (2010) were "the enormous cost implications of the reforms" (p.9). Education expenditure increased in real terms between 2003 and 2010 from 968 billion Ugandan shillings to 1,283 billion Ugandan shillings (Ministry of Education and Sports & UNESCO — IIEP Pôle de Dakar, 2014). Between 2002 and 2010, education allocation as a total share of government expenditure declined from approximately 21 to 15 percent (Ministry of Education and Sports, 2010).

Throughout this period, budget allocations continued to be under pressure from the infrastructure and energy sectors (Ministry of Education and Sports, 2010). In 2010, the Ministry of Education and Sports produced a sector-wide plan aiming to improve sector-wide efficiency through effective management of public servants and proper utilization of resources. Uganda's 2016–17 budget framework assigned the education sector just 11 percent of the national budget (Ministry of Education and Sports, UNICEF, & Radix Management Consulting, 2017), creating the need for cost-effective approaches to improve education quality.

Most recently, Uganda adopted a Teacher Incentive Framework (Ministry of Education and Sports, UNICEF, & Radix Management Consulting, 2017) to address poor levels of teacher motivation as a critical constraint to improving education quality. The framework includes a total of 47 strategies focused on "professional rewards, accountability pressures, and financial incentives" (Ministry of Education and Sports, UNICEF, & Radix Management Consulting, 2017, p.7). Some of these strategies are rooted in a 20th century carrots and sticks paradigm, while others stress the importance of a 21st century focus on teacher autonomy, mastery, and purpose. The framework attempts to provide an informed review of teacher motivation challenges in Uganda and elsewhere and was developed in partnership between UNICEF, the Ugandan Ministry of Education and Sports, and Radix Management Consulting. UNATU was also engaged in various stages of the development of the framework. It proposes short- and long- term strategies with regard to teacher motivation. The main objective of the framework is to "stimulate thinking about teacher motivation, drive policy development, and energize the implementation of a national teacher motivation strategy in a systemic, pragmatic, and sustainable manner" (Ministry of Education and Sports, UNICEF, & Radix Management Consulting, 2017, p.13). As this framework was only recently developed, the Ministry of Education and Sports of Uganda is currently assessing how best to implement the recommendations.

Generally, the majority of interviewees state that the implementation of ambitious education policies has too often remained a key challenge. As one policy leader explains:

> *Take Universal Primary Education [UPE], the idea is good, but the implementation is complicated with so many children. Supervisors are not equipped enough to carry out their job. There are District Education Officials, School Management Committees [SMC], Parent Teacher Associations, all there to support UPE. But what is the role of an SMC? How does an SMC make sure not to encroach on the role of a head teacher? They need to be sensitized on what to do.*

Participating leaders articulate how education's declining share of the overall national budget complicates the effective implementation of education policy. Additionally, interviewees point out how the assumptions that underpin many education policies do not always align with the reality in Ugandan schools. As one interviewee shares:

Policy stipulates that each teacher should teach 55 children...which requires high levels of motivation. In reality, there are even more students, not 55 but 100. There's not enough space for children to sit and for the teacher to move around and help children.

There is thus a clear need for increased sensitivity to the reality in Ugandan schools with regard to policy development and implementation. In addition, to ensure that such policies reflect the real challenges faced by teachers, such as high enrollment rates, it is critical that reliable data informs this process of policy development and implementation.

Finally, leaders frequently share their perceived lack of accountability at various levels of the education system. One interviewee, referring to the Finnish education system, describes how in Finland "there's great accountability for teachers. They are very responsible so the government does not find it necessary to use inspectors. This is what we want to see...an environment that motivates teachers and creates a good working environment."

## Creating a sustainable model of teacher empowerment

Recognizing the limited availability of financial resources in Uganda's education system, STIR Education, the government of Uganda, and UNATU aim to improve teacher motivation in a highly cost-effective manner. STIR ensures alignment with ongoing policy directions and implements its model directly through government and UNATU personnel. Teacher meetings take place in schools, to ensure minimal costs and sustainability. In addition, the model focuses on deeply embedding a powerful cycle of teachers' work to identify challenges in their classroom, developing innovative practices around evidence-based principles to address these challenges, and reflecting upon these practices.

**Teacher Career Paths, Recruitment and Retention**

> *"You want to see your students progress, it is an addiction, to see those kids, have they turned around, have they made progress. There is a relationship element between teachers and learners. It is my class, they are my learners; that relationship keeps teachers going."*

Compared to the initial Education Sector Strategic Plan 2004–15 (Ministry of Education and Sports, 2004), the revised Education Sector Plan (Ministry of Education and Sports, 2008) prominently states the aim of increasing the attractiveness of the teaching profession through a well-structured career progression framework. Minimum entry requirements to teach are set by the Ministry of Education in conjunction with Kyambogo University. These requirements currently require primary teachers to hold at least a Grade III certificate (obtained after two years of training) after completion of the Uganda Certificate of Education (UCE), which students receive upon the successful completion of lower secondary education. Lower secondary teachers must hold a diploma in education and have passed English, math, and two principal classes at A (advanced) Level in secondary school (Ministry of Education and Sports, UNESCO — IIEP Pôle de Dakar, 2014).

Several interviewees explain how low salary levels, particularly in state-funded schools, have reduced the attractiveness of the profession with many applicants selecting teaching as a last resort. However, this common perception does not reflect the reality of Uganda's state-funded education system when compared to other similar systems:

> *Primary teacher pay...is relatively higher in Uganda than in the average [low-income country]...and within the Ugandan public sector, entry pay is 22 percent higher for primary teachers...than for other civil servants...[and] the public sector is generally more attractive than the private sector, offering better wages to teachers with similar qualifications. (Ministry of Education and Sports, UNESCO — IIEP Pôle de Dakar, 2014)*

Teacher education is delivered primarily through primary and national teacher colleges (PTCs and NTCs). PTCs train primary teachers, while NTCs train secondary teachers. These teacher colleges have been under great pressure to expand their intake to train the required number of teachers needed to meet increased student enrollment rates. According to the report by the Ministry of Education and Sports and UNESCO (2014), the quality of teacher education has remained problematic. Funding for teacher education remains low and has recently experienced a real-term budget cut of almost 30 percent despite rapid increases in enrollment, absorbing only 2.5 percent of the recurrent education budget (Ministry of Education and Sports, UNESCO — IIEP Pôle de Dakar, 2014).

The majority of interviewees describe how in-service training is a major challenge for Uganda's education system, as once teachers are in school they "don't really get any support for or lack the money to attend training." Despite these perceived challenges, Uganda's teacher attrition rate based on 2011 data is relatively low in primary schools (4 percent) and secondary schools (5 percent). Both rates are in line with the African average (Ministry of Education and Sports, UNESCO — IIEP Pôle de Dakar, 2014, p.94).

The STIR model enables a much larger number of teachers to access teacher development opportunities by learning from one another, guided by key evidence-based principles regarding effective teaching practice. Upon successful completion of various stages in the two-year program, teachers receive a certificate and recognition from school leadership. Initial results of this approach show highly promising impact with regard to teacher motivation, teaching practice, and student learning in Uganda (Jeevan, 2017).

**Teacher Motivation**

> *"We need a mind-set change. We have a very tricky situation in our country, within two months of entry into the profession teachers lose passion, motivation...We need to create a sustainable mechanism to support teachers. When teachers see that their work is productive they feel good."*

A recent study by Uganda's Ministry of Education and Sports and UNESCO (2014) found that teacher motivation in Uganda is low, with 59 percent of teachers indicating that if they were to start their career again they would not be teachers. The study also found that only 16 percent of teachers aspire to remain in the profession over the next two years (Ministry of Education and Sports, UNESCO — IIEP Pôle de Dakar, 2014). This Ministry of Education and Sports and UNESCO study, which included inputs from UNATU is the only major study of Ugandan teacher motivation. There remains a need to further understand the factors and conditions that support and constrain teacher motivation across the country. As a result of the low levels of teacher motivation and other personal factors, too often teachers are not in school. When they are there, they are not spending their time actually teaching. Uganda's teacher school-level absenteeism rate is approximately 30 percent, while classroom-level absenteeism is approximately 57 percent (Education Commission, 2016), although it is unclear what teachers are spending their time on when they are absent.

When asked to define teacher motivation, the majority of participating policy leaders emphasize the joy of teaching and seeing one's students succeed, and non-financial incentives, with a strong focus on teacher collaboration:

- "Motivation is this enhancement that makes you like what you are doing and to become better...What motivates teachers is if teachers and learners do well."

- "I personally can be motivated when I teach a child and the child passes...Even when you give [a teacher] a trillion, they'll ask more. None of that really motivates teachers. But it can be demotivating when salaries do not come on time...or when you do not move up."

- "Motivation is a force that pushes one to enjoy working. It's all about the working relationship [with colleagues in school as well as with students] that one gets at the workplace."

- "Motivation is the inner gear that pushes you to do something willingly, with love."

- "Self-drive is key."

- "It may not be the money that motivates, but how the head teacher works with the teacher is key. We try to make sure teachers work as a team in the school."

Throughout the interviews, interestingly, factors such as teacher salary were generally not mentioned as effective incentives to improve teaching practice. There is not a performance-based salary-increase strategy in Uganda. Salary was highlighted in relation to the challenges in getting paid (e.g., in terms of delayed payments) and how payment issues can be demotivating. As discussed earlier, there is a need for constructive dialogue among various stakeholders in Uganda's education system to raise the status of the teaching profession and to enable teachers to experience the joy of seeing their children learn, which is illustrated by one interviewee:

> *We need a mind-set change. We have a very tricky situation in our country, within two months of entry into the profession teachers lose passion, motivation.... The community needs to support teachers; this piece is weak. Teachers go to class, they don't do what they're supposed to do and they are frustrated.... We need to create a sustainable mechanism to support teachers. When teachers see that their work is productive they feel good.*

As discussed earlier, a lack of a supportive and collaborative work environment and limited teacher recognition and professional development are key factors for why teachers quickly lose passion and motivation once they enter the profession. To address declines in motivation once teachers enter the profession, STIR Education, the Ugandan government, and UNATU are shifting their approach towards a whole-school model. Instead of only working with a small number of teachers in each school, the partners will train head teachers to facilitate improvements in teacher motivation as well as teacher development across the entire school. By doing so, they aim to ensure that any teacher in Uganda who enters the profession is welcomed in a stimulating environment that prioritizes teacher motivation and development.

**Teacher Professionalism**

Uganda's most recent version of its Education Sector Plan (2010) states that the Ministry of Education and Sports "will provide incentives for professional conduct and enforce sanctions against unprofessional conduct" (2010, p.65). When asked about teacher standards, almost all of the interviewees refer to Uganda's Professional Code of Conduct, which we could not locate as part of this study. Interviewees explain that the Directorate of Education Standards oversees school-level adherence to the standards. Teachers are introduced to these professional standards during their pre-service training, although it is difficult to assess how exactly this process occurs. When asked about sanctions in cases of misconduct or recognition for achieving or surpassing standards, interviewees stress the important role of school management committees and education inspectors. Depending upon the severity of the misconduct, teachers may receive warning letters, salary cuts, or suspensions, or have their contracts terminated. With regard to rewarding teachers, interviewees were often less clear on what types of rewards exist, and state that it is up to the school administrators to recognize and celebrate their teachers.

In Uganda, teacher promotion is variable but primarily based on seniority (Ministry of Education and Sports, UNESCO — IIEP Pôle de Dakar, 2014). Teachers may serve for six years for early posts and three additional years for senior teaching or assistant leadership roles. Finally, school leader roles are more selective and based on a formally competitive process. Although Uganda has clearly outlined promotion pathways, a lack of funding complicates the implementation of the pathways.

Across the country, a very large number of teachers compete for a very small number of promotion opportunities, which are based on experience and qualifications rather than performance. Not surprisingly, one of the key recommendations in Uganda's recently adopted Teacher Incentive Framework (2017) is to "ensure that teacher promotion is based on established teachers' knowledge and skills rather than seniority in service" (Ministry of Education and Sports, UNICEF, & Radix Management Consulting, 2017, p.59). Teacher promotion based on performance could incentivize teachers to enhance their competences and thereby enable them to increase their impact on student learning, which, as discussed above, is a critical motivator for Ugandan teachers.

**Teacher Wellbeing**

> *"If you do what you like, you become happier. If you have self-motivation, you'll like it…you'll like the learners and you'll support them."*

Teacher wellbeing, according to most interviewees, refers to the provision of basic necessities, including salary, teaching materials, and healthcare. Ugandan teachers are entitled to various benefits and allowances; however, often "beneficiaries are unaware of their entitlement…or they are unable to use it due to staff shortages" (Ugandan Ministry of Education and Sports, UNESCO — IIEP Pôle de Dakar, 2014, p.107). To illustrate, all permanent teachers are entitled to retirement benefits and receive free medical and dental care for their spouses and children, yet "few teachers are aware of this benefit and drugs are often unavailable" (Ministry of Education and Sports, UNESCO — IIEP Pôle de Dakar, 2014). This indicates that a consideration of different ways to recognize and support teachers has begun to formally enter the Ugandan policy sphere. However, there is evidence that the implementation and awareness building of these opportunities remains a challenge.

In addition to the importance of benefits and allowances, several interviewees highlight the importance of emotional wellbeing. When asked to define wellbeing, one interviewee said, "If you do what you like, you become happier. If you have self-motivation, you'll like it…you'll like the learners and you'll support them." In other words, in Uganda, wellbeing seems to be perceived as what is more commonly called job satisfaction. To improve wellbeing, or job satisfaction, interviewees discuss the importance of teacher autonomy, teacher working relationships, and creativity. One interviewee illustrates the importance of autonomy: "You have the curriculum from which you derive the lessons plans, but then you can take your own direction. You can make your lesson humorous. It can be tension-filled. It can be indoor, outdoor. This makes teaching different." Another interviewee describes the importance of teacher collaboration, indicating that when "teachers are assisting one another, working together, working as a team, they are focused. They are sharing work and doing very well." The importance of creativity also features in interviews. As one leader explains, "All subject areas have creativity…you can bring a recording, a video…in each area you can be creative. You can bring in innovations. That is what makes a lesson different and interesting." Again, the responses from the interviewees indicate that teacher intrinsic motivation, wellbeing, and job satisfaction seem to be closely related although causality between these different areas needs to be explored further.

Uganda's recently adopted Teacher Incentive Framework (Ministry of Education and Sports, UNICEF, & Radix Management Consulting, 2017) recognizes the importance of teacher autonomy, collaboration, and creativity. One key framework recommendation aims to provide "teachers with greater autonomy in classroom pedagogy" (Ministry of Education and Sports, UNICEF, & Radix Management Consulting, 2017, p.65). The framework stresses the need to "design a framework for peer collaboration which is preferably school-based or cross-school [to] provide opportunities for small groups of teachers to observe and learn from each other's practice" (Ministry of

Education and Sports, UNICEF, & Radix Management Consulting, 2017, p.64). Finally, the framework emphasizes the importance of creativity and proposes "annual forums at local, national, and regional level for teachers to show off their talents, innovations and share best practices" (Ministry of Education and Sports, UNICEF, & Radix Management Consulting, 2017, p.62).

STIR Education, the government of Uganda, and UNATU emphasize the importance of teacher autonomy, creativity, and collaboration, not just as important for teacher wellbeing but also for teacher motivation. Interestingly, these constructs have been found to be critical for effective teacher continuing professional development, which illustrates the need to closely align teacher motivation and teacher development programs.

## Final Thoughts

In Uganda, teaching is seen as a noble profession and teachers are perceived to be role models in society. However, the introduction of universal primary and secondary education has greatly increased the pressure on teachers as well as on the wider system to effectively support its teachers. The Ugandan Ministry of Education and Sports has increasingly recognized the critical role of teachers in improving learning, but at times the implementation of overly ambitious education policies has been limited by financial constraints and a perceived lack of accountability in the system. Teacher salaries are relatively high in Uganda, when compared to other countries in sub-Saharan Africa, yet opportunities for career progression are limited as promotion is restricted by budget constraints. Moreover, promotions are not based on performance and the overall influence of teacher training is often negligible. Teachers' desire to help students improve is a major factor for teachers to enter and stay in the profession.

Teacher motivation in Uganda is low, which in part accounts for high absenteeism rates. At the same time, there may be other reasons for absenteeism, such as distance from the school, gender issues, and health complications — hence, the need to further explore the driving factors behind high rates of teacher absenteeism. Absenteeism creates significant cost to the education system, not to mention its negative effect on student learning. Participating policy and practice leaders stress the excitement of seeing one's students succeed, as well as the important role of teacher collaboration and the presence of certain fundamental factors such as on-time salary payments. The partnership between the government of Uganda, UNATU, and STIR Education aims to stimulate this excitement among teachers of seeing one's children and reignite and sustain teacher intrinsic motivation by supporting key education stakeholders at various levels of the system to facilitate teacher collaboration. This innovative partnership has shown initial promising signs of impact with regard to teacher motivation, teaching practice, and student learning (ID Insight, 2017).

Uganda's Professional Code of Conduct outlines teacher standards, and stakeholders generally are familiar with these, which include sanctions in case of misconduct. Uganda's reward system, however, is limited as too many teachers compete for a very small number of promotion opportunities and rewards for good performance vary between schools. In terms of wellbeing, teachers are often not aware of benefits and allowances and therefore miss out on basic necessities. The majority of the interviewees emphasize teacher autonomy, creativity, and collaboration as key to both teacher development and intrinsic motivation, which in turn seems to lead to enhanced teacher wellbeing. STIR Education, the Ugandan Ministry of Education and Sports, and UNATU aim to further understand causality between these different areas to thereby more effectively facilitate improvements in teacher motivation across Uganda's education system.

## State/Province-level Study 4: Ontario (Canada)

To develop this study, we reviewed relevant research studies, web data, and policies from the school districts and public organizations, the Ontario College of Teachers (OCT), and the teaching federations. We also examined websites published by the Ministry of Education (MoE), People for Education, the Truth and Reconciliation Commission and others. We interviewed 11 policy leaders representing the MoE, the OCT, teaching federations, school district leaders from urban and rural boards, principals, and public interest organizations.

In Canada, compulsory education for children from ages 6 and 18, kindergarten to grade 12 (K to 12), is the responsibility of each of the 10 provincial and three territorial governments. Provinces and territories are also responsible for higher education provision. There is no federal framework for education, but the Canadian constitution determines that provinces and territories must offer education in both official national languages: English and French. The only federally operated schools are those in indigenous reserve communities.

Ontario is the largest province in Canada, with a total population of 13,982,984. All children are obliged by law to begin school at age 4 and continue until age 18. In 2015–16, there were 1,993,433 students in the province, with 95 percent attending public schools. Of these students, 1,357,673 students were enrolled in state-funded elementary schools (K to 8), and 635,760 students were enrolled in state-funded secondary schools (9 to 12). School populations, especially in urban areas, are diverse, with many newcomers, English language learners, students with identified exceptionalities or learning needs, and a growing population of indigenous students (James and Turner, 2017).

The publicly assisted education system in the province is state funded. All public schools are funded by the MoE and funding is tied to enrollment in the system, with schools and districts being allocated funds per student per year (Grants for Student Needs). In 2015–16, the MoE reported that the Ontario government's total investment in education was estimated at $23.8 billion (CAD) of Ontario's $798.2 billion GDP (Ontario Government, 2017). With a provincial budget of $141 billion in 2017, education represents 17 percent of Ontario's budget expenditures.

There are 72 district school boards in Ontario, classified as English Public (31), English Catholic (29), French Public (4), and French Catholic (8) (MoE, 2017a). In 2014–15, these districts encompassed 3,974 elementary schools and 919 secondary schools. School boards implement provincial MoE policies within their own regional context. Whether located in remote, large rural areas, or more densely populated urban environments, each district school board has a similar governance structure, with a director of education, superintendents (who are in charge of groups of schools), and principals, who are the school-level leaders. Trustees are elected in municipal elections, and their role is to represent the parents and community in discussions and provide advice on decision-making (People for Education, 2011).

In order to teach in the publicly funded systems, teachers must be members in good standing of the OCT, the self-governing regulatory body "which licenses, governs, and regulates Ontario's teaching profession in the public interest." (OCT, 2017) Teachers must also belong to one of the teaching federations or unions. According to the Ontario MoE (commonly referred to as "the ministry"), in 2014–15 there were 7,329 principals and vice-principals across the system, 61.5 percent of whom identified as female. In this same period there were 115,155 classroom and other teachers, with 72.4 percent identifying as female. The system also employed 9,198 early childhood educators to work in elementary schools, 98.4 percent of whom identified as female. It has been recognized that the teaching population in Ontario does not reflect the diversity of the students and communities that it serves. Recently some school districts have begun collecting information about the social identities of their teachers. In a large urban district in the Greater Toronto area, the board recently reported that only about a quarter of their education workers were from racialized communities. Data from the 2011 National Household Survey for the region indicate that 57 percent of Ontario's population, which in 2011 was 12,851,821, identify themselves as members of racialized communities (Statistics Canada, 2011) These studies look to The Employment Equity Act, which defines visible minorities as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour." Categories include South Asian, Chinese, Black, Filipino, Latin American, Arab, Southeast Asian, West Asian, Korean, Japanese, and Visible minority, 'not included elsewhere' (n.i.e.), and Multiple visible minorities (Statistics Canada, 2015).

Education appears to be a valued profession in Ontario (Hart and Kempf, 2017). It is well resourced in the province, and viewed as an important part of the public good by the government and members of the public. This positive messaging around the teaching profession is supported by the government in power as evidenced in the *Vision for education in Ontario: achieving excellence* (MoE, 2014). This document states:

> *The evidence of the past decade demonstrates that our education system is capable of making real, positive change. We know that in order to build a better system we need to value the work of all education professionals — early childhood educators, teachers, support staff, school and system leaders and administrators. (MoE, 2014, p.3)*

There have been consistent and ongoing efforts to collect, analyze, and use data to inform decision-making at all levels of the system in order to support the learning of all students in inclusive learning environments. There has also been continuous communication of the results of these efforts through reports on student learning outcomes and graduation rates.

Over the past decade, the provincial government, teacher federations, and other actors have developed and engaged in largely positive and mutually supportive relationships. The New Teacher Induction Program (2006), which was developed from an MoE partnership working table on teacher development, reflects ongoing cooperation and continued participation by all stakeholders in education to support entry to the profession (MoE, 2010). Most policy leaders interviewed see relatively strong alignment in how different actors in the system view the systems and their roles. Teachers feel valued in the system in Ontario and working conditions are positive, contributing to the high rate of teacher retention. Under these conditions, certain elements of the profession, such as increased collaborative relationships between teachers, have flourished. The system also places a major emphasis on teacher-directed, ongoing professional learning to promote teaching practice which is tied to research and evidence in order to improve outcomes for all students.

### State of the Profession and the Public Discourse

In 2014, after extensive consultation, the MoE refined its overall education strategy for Ontario by introducing its *Renewed vision for Ontario*. The vision's four goals are: achieving excellence, ensuring equity, promoting wellbeing, and enhancing public confidence in education. These goals are designed to create equity of outcomes for all students and are explicitly and implicitly reflected in the policies developed, implemented, and communicated by the government and school districts. Stakeholder input and data from school districts and assessments led to the identification of two areas for further attention and resource allocation: The wellbeing strategy, *Promoting wellbeing in Ontario's education system* (MoE, 2017b) and the renewed math strategy, *A renewed math strategy for Ontario* (MoE, 2016b).

The education system in Ontario includes a range of organizations that are important and somewhat distinctive to the province. The OCT, the self-regulating body for the teaching profession, was established in 1997 and is responsible for teacher certification, accreditation of programs of professional education, and regulation of the profession according to professional and ethical standards. The Education Quality and Accountability Office (EQAO), established in 1996, is an arms-length body that oversees large scale assessments of student learning in grades 3 and 6 in reading, writing, and mathematics, and in grade 9 in mathematics. A "high-stakes" grade ten literacy test is the only one of these assessments that is a requirement for secondary school graduation. People for Education is an influential public interest group, established in 1996, which conducts independent research into education and communicates about complex educational issues and the needs of public schools across the province. The four teacher federation affiliates work collaboratively with their umbrella organization, the Ontario Teachers' Federation, to support their teacher members in professional learning. For example, all federations support the Teacher Learning and Leadership Program established in 2007, which provides ministry funding to experienced teachers to work on self-directed, teacher-led projects to enhance their teaching practice to better serve their students (Ontario Teachers' Federation, 2017).

The recent Ministry's Policy Program Memorandum 159 (PPM), *Collaborative professionalism,* (MoE, 2016a) demonstrates the attention to ongoing relationships and collaborative efforts by all of these education partners. It expresses commitment to:

- building a shared understanding of collaborative professionalism, and articulating a commitment to working together to further improve student achievement and wellbeing of both students and staff;

- transforming culture and optimizing conditions for learning, working and leading at all levels of the education sector in alignment with *Achieving excellence: a renewed vision for education in Ontario* (MoE, 2014).

For this study, we interviewed policy leaders across the system including those in teacher federations, school boards, and government. Consistently, leaders share their belief that teachers view their work as important and valued. Leaders also say that teachers appear to recognize that they receive reasonable compensation and have good benefits and working conditions. For the past three decades, teacher federations have been and continue to be active and vigilant in negotiating collective agreements. Evidence of general satisfaction and trust may be found in the recent independent agreement by all four of the teacher union affiliates to extend the current centrally bargained province-level collective agreements for two years to maintain stability in the system for students. By coming to these agreements, energies can be directed to the work of schools and teaching rather than prolonged negotiations and labor disruptions can be avoided.

Public discourse related to the education system and teachers also tends to be positive. In the 2015 survey, *Public attitudes toward education in Ontario 2015,* an independent, non-partisan study conducted by Ontario Institute for Studies in Education/University of Toronto researchers, 70 percent of the respondents expressed satisfaction with teachers and 61 percent indicated they would even be in favor of increasing spending on schools, suggesting confidence in schools. Over the past 14 years, graduation rates for secondary school students have grown to 87 percent. Policy leaders in all sectors referenced this statistic as evidence of success.

Within Ontario, a dynamic balance exists between the centralized and decentralized components of the education system. The provincial government has very clear policies and regulations regarding areas such as curriculum and assessment; student support and services; teacher hiring, appraisal and development; and school board governance. The OCT has a central oversight role related to teachers and teacher education. However, while the rules governing province-wise policies and regulations are centralized and controlled, implementation is assigned to the local school districts. School districts in Ontario are referred to as school boards in policy and legislation to indicate that they are not just geographical but locally administered entities. School boards are independent corporate entities that have discretion over local processes and procedures, implementation of central policies, and human resources. Monitoring of policy implementation frequently involves boards reporting on actions to branches or divisions of the provincial MoE and through them to the public.

The Ministry makes efforts to allow individual boards to take local contextual conditions into account when implementing province-wide strategies and communicating their outcomes against the accountability criteria using both quantitative and descriptive data.

System-level province-wide information on Ontario educational success is provided through annual EQAO reporting. These yearly results influence government policy, school district plans and actions, teacher professional learning opportunities, and teacher federation initiatives. For example, recent EQAO math results analysis has resulted in the renewed math strategy in which all educational organizations across the province, including districts, have agreed to focus resources, energy, and attention on supporting teacher learning and practice in improving math outcomes.

## Education Policy and Strategy

*"Policy dense."*

Education in Ontario may be viewed as "policy dense" in that policy documents are evident at classroom, school, and system levels. Policies flow from and are aligned with the vision for the system of *Achieving excellence*, which is defined as success for all students, whatever their learning needs and strengths. The province and districts provide a comprehensive and evidence-based range of documents and resources addressing how *Achieving excellence* drives curricula, instruction, differentiation, assessment, evaluation, and reporting. Similarly, teacher performance appraisal, professional learning programs, and practices such as professional learning days, school and board improvement processes, hiring practices, and school-level organizational features are all outlined in policy and subsequent resources. *Growing success: assessment, evaluation, and reporting in Ontario's schools, kindergarten to grade 12* was named by almost all policy leaders as being a key policy document across the province.

Many school board and government policy leaders emphasize the use of research and evidence in policy development and implementation. Consultation and collaboration are also frequently referenced as a mainstay of policy development, implementation, and review in Ontario.

There are dozens of province-wide government regulations, policies, documents, and policy program memoranda (PPMs), which provide a range of broad and more prescriptive parameters and direction to educators. Elements included in these regulations include class size, teacher appraisal, annual learning plan requirements, and hiring practices. These are often even further detailed in policy documents or PPMs. For example, additional policies include *Learning for all: a guide to effective assessment and instruction for all students, kindergarten — grade 12; Professional development days; The school effectiveness framework*; provisions for students with exceptionalities such as learning disabilities; Protected time for daily mathematics instruction; Bullying prevention and intervention.

Additionally, the Truth and Reconciliation Commission's *Calls to action* (2015) is recent national policy which exists to inform teaching across Canada as a whole. The Truth and Reconciliation Commission was convened by the national government to gather evidence and collect stories from survivors of the state-sponsored Residential Schools for Indigenous Children and Youth.

Calls to Action numbers 62 through 65 specifically address education and are entitled Education for Reconciliation. The actions relate to the need for reflective and forward thinking curricula in schools, initial teacher education, and ongoing professional development. As part of the Indigenous Education Strategy (MoE, 2016c) in Ontario, the Ministry has recently established First Nation, Métis and Inuit leads in each school district.

In Ontario, ministry policy has a profound impact on almost every aspect of the teaching profession. As reflected in the interviews, the Ontario practice of having all stakeholders at the table during policy development is extremely important. The ministry regularly seeks feedback from the different regions and sectors within the province, including Catholic, public, rural, urban, and French and English boards. Leaders share how ensuring that educators feel consulted leads to more thoughtful policy and stronger commitment from the field. The government's commitment to consultation is most recently evident in PPM 159 on collaborative professionalism (MoE, 2016a), which was referenced by almost every policy leader. The PPM "clarifies a shared commitment of stakeholders to building a culture of collaborative professionalism in Ontario's education system" (MoE, 2016a). It encodes a joint effort to transform culture and optimize leading and learning at all levels.

There was a sense from the policy leaders that flexibility, supporting collaboration, and recognizing the professionalism, commitment, and contributions of teachers through a policy such as collaborative professionalism was good for teacher motivation and commitment to the profession. PPM 159 states that "in Ontario, collaborative professionalism is defined as professionals — at all levels of the education system — working together, sharing knowledge, skills and experience to improve student achievement and wellbeing of both students and staff."

## Teacher Career Paths, Recruitment and Retention

To be certified by the OCT as an Ontario teacher, individuals must complete an undergraduate degree followed by a second-entry program of professional education called an Initial Teacher Education (ITE) program (OCT, 2016a). Ontario ITE programs are only offered by universities, primarily in the southern, more densely populated parts of the province. In contrast to many other jurisdictions, there are no alternative routes to teacher certification. Thirteen publicly funded universities offering ITE programs now graduate about 4,500 teachers annually.

In 2015, following stakeholder consultations, the MoE and the OCT made significant changes to the policy governing ITE programs — extending it to four semesters from two, increasing the length of practicum time from 40 to 80 days, and outlining mandatory core content for programs. These mandatory changes were made in response to the increasing complexity of teaching and recognizing that Ontario-based ITE programs, while highly respected, were the shortest in Canada. These changes are viewed as a final step in transforming education in Ontario.

Both recruitment and retention of teachers have been relatively robust and stable in Ontario for the past 15 years. In fact, Ontario currently has an oversupply of teachers, which points to the desirability of the teaching profession (OCT, 2016c). Additionally, retention rates are extremely strong in Ontario (Clark and Antonelli, 2009). Retention in Ontario is tracked primarily by membership in the OCT. Although the rate of non-renewal of

college membership has risen to one in 12 (eight percent) of Ontario faculty of education graduates certified in 2015 failing to renew their teaching licenses in 2016 (OCT, 2016a). However, it seems that much of this increased non-renewal of membership is employment-market related (OCT, 2016a). Data show that the oversupply of teachers coupled with decreasing student enrolment is resulting in protracted and partial entry to the profession, with a five-year timeline for many teachers to gain permanent employment (Strachan, McCreery, & Nemes, 2017).

Since 2006, the province-wide New Teacher Induction Program (NTIP) has provided orientation, professional learning, and mentoring in support of new teachers, resulting in very few teachers with permanent contracts voluntarily leaving the system. Situations of surplus and redundancy, or a lack of available positions at the beginning of the career, are the major causes of teachers leaving the profession. The OCT Transition to Teaching Report 2016 indicates that graduates of ITE programs must frequently pursue alternative employment. The OCT survey found that, of those first-year teachers who are employed to any degree, while 86 percent rate their teaching experience as very good or excellent, 39 percent are concerned or very concerned about job security (OCT, 2016c).

Recent policy changes set in place by Ontario Regulation 274/12, Hiring practices, have formalized an entry path for beginning teachers that requires 20 days and ten months of daily occasional work, followed by successful longer-term work of four months or more, to achieve eligibility to apply for permanent positions. Teachers with greater experience are ranked higher on the long-term occasional list and are given preference. This results in many beginning teachers taking five years to obtain permanent positions (Strachan, Creery & Nemes, 2017) and leading to some early attrition as graduates obtain positions in jurisdictions outside of Ontario or find other work, as they cannot manage financially with precarious and intermittent employment. These circumstances vary along district, subject, and regional lines. For example, remote and rural boards in the northern parts of Ontario with smaller school populations may have difficulty offering a full teaching assignment in a specialized area such as Native languages or Arts education (People for Education, 2017). The *Transition to teaching* (Ontario Ministry of Education, 2016a) report indicates high demand for qualified French-language system teachers and those qualified to teach French as a Second Language. Both categories of teachers are becoming employed much more readily.

Once they have successfully obtained a permanent teaching position, the New Teacher Induction Program requires that, along with the aforementioned supports, new teachers must record their growth activities on an Individual New Teacher Induction Program (NTIP) Strategy Form and complete two successful Teacher Performance Appraisals (TPAs) within the first 18 months of teaching to receive notation on their Ontario Teaching Certificate. The TPA for new teachers, like that for experienced teachers, is built on the Standards of Practice, and requires an observation of teaching by a school principal,

a debrief session, and a written evaluation indicating strengths and areas for further growth. There is an extremely high success rate as evidenced by the number of NTIP completions reported in the OCT annual membership statistics for new teacher, as the appraisal is part of a growth-oriented process. If there are concerns identified during the process, a supportive growth plan is put in place.

Policy leaders indicate that while the "extended" and "delayed" entry into the profession for newly accredited teachers due to the hiring practices policy is common to many, there is no one typical teaching career path in Ontario. While some teachers may elect to seek formal school-level leadership positions by obtaining the qualifications to become principals and perhaps eventually district-level supervisory officers, many teachers become involved in informal, "small l" teacher leadership roles. For examples, both schools and districts will have various opportunities for teacher leaders, including as literacy coaches, working with colleagues in divisional teams or leading school-level initiatives. Our interviewees indicate that despite the lack of a formal and regularized career ladder or financial incentives structure, the majority of teachers remain engaged in learning and leadership through several possible pathways via their own personal initiative. These include continuing to seek learning opportunities, collaborating with colleagues on school or "family of schools" projects, changing grade or division levels assignments or schools, or undertaking secondments (unpaid leave on assignment) to other organizations, such as faculties of education or ministerial branches.

## Teacher Motivation

> *"**Intrinsic drive** to continue to learn as a professional with the primary purpose of supporting all students in their class."*

Although policy leaders identify both internal and external motivating factors for teachers, the overall greater emphasis is on internal motivators. Notably, one participant defines motivation as the "intrinsic drive to continue to learn as a professional with the primary purpose of supporting all students in their class." The universal factor identified as the source of motivation for teachers by all participants is student success, and the ability to make a difference in the lives of students.

The recent move towards greater teacher collaboration on curriculum and instructional planning and more job-embedded opportunities to work with colleagues is explicitly linked to teacher motivation by many policy leaders. Several mention that the movement to "de-privatize practice," defined as teachers opening their doors to each other, sharing their successes and questions, and looking at student work together, was revelatory and revolutionary. Leaders link these collaborative experiences to teachers having an increased sense of individual and collective efficacy, creativity, and capacity to differentiate to address student strengths and needs, which policy leaders believe are essentially connected with and contributing to motivation.

Many policy leaders define motivational supportive school-level leaders as those who create space for teacher collaboration and work with teachers on projects. Within the system, teachers are viewed as engaging in positive relationships with one another and with principals in schools. The degree to which teachers have autonomy is also connected to motivation, with interview participants speaking about the ability for teachers to exercise creativity in the classroom and in their own professional lives.

All interviewees talk about teachers being relatively well rewarded in both salary and benefits, especially with respect to their American counterparts. However, all agree that salary is not a primary motivator for teachers in Ontario. One leader specifies that teacher starting salaries are lower than those of other professions and that teachers reach their maximum pay level within 10 years of full-time work. While few awards recognizing teacher excellence are offered by school districts and federations, leaders note that there are no financial incentives for teachers who perform well or for teachers whose students perform well. Instead, a more informal recognition of teachers' efforts is seen through student success, and acknowledgements by students, parents, colleagues, and leaders are seen as the recognition that is most frequently given and valued.

Every policy leader mentions the broader context in the province, citing that the teaching profession is now experiencing a time of relative labor peace, with support from the government in power. This has positively influenced media attention and gained support from the public, including parents. All actors in the system, from the MoE to teacher federations and district school boards, are generally working constructively together within the system. This larger context of inter-relationship, cooperation and shared purpose was cited as fostering motivation for teachers. The policy leaders suggested that teachers' continued engagement in ongoing professional learning and changing teaching practice on behalf of their students are demonstrations of motivation. Many leaders cite PPM 159, *Collaborative professionalism,* as evidence.

### Teacher Professionalism

Several policy leaders indicate that a prime factor in the recognition of teaching as a respected professional career is the OCT. The college oversees the accreditation of teacher education from ITE through continued professional learning with additional qualification and principals' and supervisory officers' courses. The OCT also sets the entry requirements into the profession, holds responsibility for setting and monitoring professional standards, regulates educators, and investigates and resolves complaints about OCT members. The OCT currently has 240,000 members, most of whom are classroom teachers, with fewer working as principals, vice-principals, and educational leaders. The OCT acts as a regulator to ensure confidence in public education and also works to promote the sense among its members and the general public that teaching is a strong, evidence-based, ongoing learning profession. The existence of a body like the OCT, with its role of both public

accountability and recognition of teacher development, is viewed by several interviewees as a way of elevating the status and professional respect of teachers. Teaching federations also play a role in promoting public awareness of the professional efforts and successes of teachers.

In Ontario, a focus on teacher professionalism begins with the entry standards for ITE and continues to teacher training programs, where candidates must learn the standards of practice of the profession. Program entry prerequisites include both academic averages and written statements that attempt to assess understanding of the teaching-learning process, orientation to professional growth, and commitment to learners (Petrarca & Kitchen, 2017). For practicing teachers, who must also continue to meet and abide by the standards of practice for the teaching profession specified by the OCT, professionalism continues through ongoing professional learning, which is offered through many different unions, the OCT, the ministry and the district school boards, often in joint collaboration. The professional learning can take many forms, such as collaborative projects with colleagues in schools; additional qualification (AQ) courses which are accredited by the OCT; graduate degree courses; institutes offered by federations; and other teacher-led collaborative programs. The OCT Professional Learning Framework for the Teaching Profession outlines a full list of professional learning activities (OCT, 2016d).

AQ courses are a standard form of 120 hours of professional learning on a range of curricular and pedagogical topics offered by providers accredited by the OCT, which regulates their content development and review. Providers of such courses include faculties of education, school districts, and teacher federations. It is important to note that AQ courses are not required, and teachers determine their own needs and paths for learning. However, formal leadership positions often specify particular qualifications at a specialist level. Additionally, AQ courses are used by new teachers to enhance their employability and to move themselves into the highest salary category if their degree does not already place them there. Policy leaders speak about the enthusiastic participation of teachers in professional development, sharing that instances where specific courses have been subsidized can result in thousands of educators signing up. In 2016, 34,397 AQs were awarded to OCT members, an increase over the 33,685 awarded in the previous year (OCT, 2016c).

Autonomy is seen as an area of some dialectic as our interviewees state that although policy prescribes curriculum, assessment, and instructional strategies to a greater degree than in previous decades, independent capacity and responsibility to innovate and differentiate in their settings still exists for individual teachers. The autonomy/accountability balance was also evident in the cyclical provincially mandated Teacher Performance Appraisal (TPA) and the Annual Learning Plan (ALP). Experienced teachers participate in a five-year cycle for teaching appraisals, unless they request an off-cycle appraisal or their principal initiates it. Though growth-oriented, this process is consequential and may result in identifying areas for demonstration of

improvement in practice. If a school leader identifies that a teacher is not meeting TPA expectations, a series of developmental next steps is agreed to support the teacher's improvement. These efforts would be given intensive assistance by the principal and the federation. Only in cases of serious misconduct reports or a teacher being deemed not fit to practice do harsher sanctions, such as placing conditions on a teaching certificate or revocation of a teaching license, come into play.

The ALP is a mandatory requirement for teachers but offers great scope for individualization. The ALP and TPA are mechanisms that can be viewed as monitoring to ensure that teachers are fulfilling their professional duties. There is a range in the ways in which the ALP process is enacted. Each year, every teacher must complete, discuss, and file a plan with their principal, but the process can be a more perfunctory exercise or a more meaningful impetus for individual and collective professional learning in the school, depending upon the support and connection of the project to classroom, school, and collegial priorities. Some policy leaders advocate the potential of the ALP and efforts to support sharing of effective practices across school boards.

### Teacher Wellbeing

Teacher wellbeing emerges from the interviews as a new and emerging area of focus across the Ontario education system. Ministry leaders highlight upcoming work and policy attention in the area. This new focus on educator wellbeing follows a focus on student wellbeing, captured in a recent ministry-level engagement paper entitled *Promoting and supporting student wellbeing* in November 2016 (MoE, 2017b). Student wellbeing is defined as "enhanced mental and physical health, a positive sense of self and belonging, and the skills to make positive choices." Across our interviews, leaders distinguished wellbeing for educators from motivation or job satisfaction. No one definition emerged, yet leaders often mentioned physical health, a positive approach to work, and stress tolerance. They also related wellbeing to both working conditions in the system and the work/life balance and situations of individual teachers.

Leaders raise the following policy-related elements of the profession and education system in relation to wellbeing: regulation of class sizes, preparation and professional learning time, sick leave entitlement, board/district-level health benefits, and employee assistance plans. Interviewees view vacation time as attractive but necessary in an intensive educational role. Other essential elements to support teacher wellbeing include a relatively high salary grid, and a healthy pension plan, which reflects a teacher's highest paid five years in the profession. Positive relationships on a staff team, including a healthy teacher/principal relationship, are mentioned as well as the important recognition that student wellbeing is affected by teacher wellbeing—but that the wellbeing of the adults in schools is worthy of attention in and of itself.

Participants speak about the large variety of opportunities for teachers to continue to learn and grow, take on leadership roles, and develop their capacity to be creative and innovative. However, these opportunities are also identified as a tension, as these experiences are often a path for the most skilled or interested teachers, which, ironically, may lead motivated teachers to become stretched and "burn out."

There is a sense among interviewees that the education system in Ontario is very busy and that work is consistently intensifying as the knowledge and evidence base for teaching deepens and expectations for improvements in practice increase. In response, districts are carrying more and more initiatives. Several of those interviewed refer to the importance of efforts such as the Provincial Initiatives Committee, which was created in an attempt to review and manage the range of different areas of effort and focus across the system.

Several participants also acknowledge the importance of recognizing factors in teachers' lives outside of the school system that can also influence their wellbeing, such as family life and personal demands.

### Final Thoughts

There is a strong, overarching alignment in the voices, views, and narratives of the policy leader interviewees regarding the state of the profession; the motivation, efforts and professionalism of teachers; the views of the public; and the positive outcomes of a consistent system-wide focus on serving diverse student needs through teacher collaboration and learning in Ontario. There are also common tensions and areas for continued attention identified by the interviewees. Several mention that continuous improvement becomes more challenging when you have had successes and that efforts will need to be even more focused, research-based, and collaborative if the needs of all students are to be met. There is confidence and trust expressed in the capacity of teachers to meet these goals. The policy leaders also recognize the intensity and complexity of the work, and the dynamic balancing of the "loose-tight," centralized-decentralized, autonomy-collaboration, and creativity-accountability tensions. Additionally, leaders reference the necessity of listening and including the perspectives of all stakeholders in education, while acknowledging that this will increasingly require deep thought, strong research, and continued authentic and challenging collaboration.

# State/Province-level Study 5: Uttar Pradesh (India)

**U**ttar **Pradesh is India's most populous state, with approximately 200 million people, 30 million of whom are under age 7 (Government of Uttar Pradesh, 2017).** There are 75 administrative districts in Uttar Pradesh, and these are further subdivided into 822 blocks (Government of Uttar Pradesh, 2017). As of 2014–15, Uttar Pradesh has 252,823 schools (National University of Educational Planning and Administration, 2015) divided into three phases: elementary (including primary and upper-primary), secondary, and senior secondary. Children start five years of primary at ages 5 to 6. At age 10 or 11, they start three years of upper primary school. Secondary school education starts at age 14, with students spending two years in lower and two years in senior secondary.

In 2014–2015, despite a relatively high gross enrolment rate of 95 percent at primary level, the transition rate of children progressing from primary to upper primary sits at 79.1 percent and is the lowest in India (National University of Educational Planning and Administration, 2015). The net enrolment ratio of Uttar Pradesh in 2014–15 was 85 percent at primary level, 59 percent at upper primary level, 40 percent at secondary level, and 37 percent at upper primary level (National University of Educational Planning and Administration, 2015). Uttar Pradesh's literacy rate (69.7 percent) ranks 29th out of the 35 Indian states (Government of Uttar Pradesh, 2017). Pointing to an urgent learning crisis in Uttar Pradesh, the proportion of public school children in Standard 3 who can read at least a Standard 1 text decreased from 24 percent in 2006 to 13 percent in 2010 (ASER, 2014). As teachers have shown to make the biggest in-school difference to children's learning, these declining levels of learning outcomes in Uttar Pradesh raise urgent concerns around teachers' ability to support the wider range of students attending schools, teacher quality and motivation.

According to Ramachandran et al. (2005), low levels of potential teachers' motivation to join the profession, and to teach well, have been a key driving force to India's learning crisis. In addition, across India, "teaching as a profession is in question as the social status of the teacher continues to erode" (p.4). These concerns around the perception of the teaching profession and teacher motivation are particularly urgent in Uttar Pradesh as the state has experienced a rising teacher absenteeism rate from 27 percent (2003) to over 31 percent (2010) (Muralidharan et al., 2014). Muralidharan et al. (2014) explain that teachers are recorded absent when on a given day "they were not found anywhere in the school in the first fifteen minutes after enumerators reached a school" (p.6). A more recent study by the Azim Premji Foundation (2017) states that poor levels of motivation might not be driving these low levels of teacher attendance, but instead system-level demands such as administrative work pull teachers away from the classroom. It is thus critical that future studies

better assess not just whether teachers are at school or not, but why they might be away from the classroom or school. This could in turn help to develop a more comprehensive understanding of teacher effort and to what extent improved motivation could lead to improved teacher attendance.

In response to these significant education quality and teacher motivation challenges, the Uttar Pradesh government has been working to develop systemic and sustainable approaches to improving student learning. In 2014, due to the magnitude of these challenges, particularly with regard to the current state of the teaching profession, the Uttar Pradesh government started a partnership with STIR Education, a non-governmental organization. STIR's educational improvement model strives to improve teacher motivation in a sustained manner by empowering teachers to collaboratively realize and observe their impact on student learning. Together, the government of Uttar Pradesh and STIR Education currently work in 11 districts, influencing more than 12,000 teachers. This collaboration is unique in its focus on training key education stakeholders at various levels of the education system to re-ignite and sustain teacher motivation. The partnership offers an example of how a non-governmental organization and a public education system can collaborate to drive improvements in learning. The long-term objective of the partnership is for the education system to fully own and sustain the model of working. The government of Uttar Pradesh and STIR believe that realizing this objective could in turn set an example for other states in India on how to improve education quality in a systemic and cost-effective manner by brokering meaningful and sustainable partnerships.

This study combines a comprehensive review of Uttar Pradesh's key education policies over the past 20 years with the analysis of 11 in-depth interviews with major actors in the education system including stakeholders from government at state, district, and block level, as well as from the teacher union and civil society. We explore emerging discussions and debates related to the teaching profession and teacher motivation in Uttar Pradesh, including the partnership between the government of Uttar Pradesh and STIR Education aimed at realizing sustainable improvements in teacher motivation. We also highlight initial evidence related to the influence of an external NGO–government collaboration to address the factors and conditions that support teachers and reinvigorate their passion for teaching, as well as their motivation to spend more time teaching, improve the quality of teaching, and participate in professional learning.

**State of the Profession and Public Discourse**

When asked about the teaching profession, the majority of policy leader interviewees state that being a teacher in Uttar Pradesh is a noble job as it nurtures the future generation and gives shape to the nation. In public media, however, government teachers are often highlighted as responsible for low education standards due to being absent or late and providing poor quality teaching. Some interviewees believe that teachers often lack the passion and drive required to provide high quality education. However, others stress that many teachers are implementing innovative classroom and school-based practices, but that positive practices rarely get highlighted in public media. Interviewees also state that the teaching profession is considered as a secure, stable profession with relatively high salary levels compared to other professions. These perceptions question whether teachers who join the profession generally do so because of the prospects of a stable income, or because they have a genuine interest and passion for the act of teaching. This in turn could have significant implications on strategies to motivate and retain teachers in the profession.

Teaching in private schools, on the contrary, is considered as less attractive due to lower salaries, fewer welfare benefits, and higher academic workloads. As Kingdon (2017) says:

> *by the early 2000s...in Uttar Pradesh...private school teachers were paid, on average, only one-fifth of the pay levels of government school teachers...[while] in 2009, government school teachers' salaries roughly doubled in one go...and private school teachers' market-determined salaries saw only incremental change. (p.24)*

Interviewees describe salary increases in Uttar Pradesh's public schools in 2009. However, they note that these increases have not been effective in improving teachers' attendance at school, let alone teaching practices. As discussed above, the limited impact of salary increases on teacher attendance could also be caused by systemic challenges, such as large amounts of administrative work imposed on teachers, which prohibit teachers from being present in the classroom. Policy leaders illustrate that the rapid need to recruit large numbers of teachers to meet increases in student enrollment has led to many people joining the profession who view teaching as a last resort rather than demonstrating an excitement and passion for being a teacher. One interviewee illustrates how this challenge may manifest:

*Higher education is easily accessible to the young generation these days, so even those who do not have any intrinsic drive to become a teacher also get into this profession thinking that they could easily take out time for their preparation for other higher competitive exams. So, such teachers hardly put their energy and time on improving student learning outcomes. They are more focused on preparing their own competitive exams for comparatively higher [paid] jobs.*

The government of Uttar Pradesh faces two significant challenges. First, how could the government motivate those already in the profession who might not have been excited about the act of teaching when they joined the profession to teach, and to teach well. And second, how could future teacher recruitment strategies become more focused on recruiting those who at least have some excitement about teaching, and how would teacher motivation strategies look different for this next generation of teachers.

Several interviewees state that teachers' intrinsic motivation, or a teacher's genuine desire to help children learn, has traditionally been an important factor in encouraging teachers in Uttar Pradesh to join the profession and improve as professionals. Therefore, efforts to carefully recruit teachers who are driven by a passion for teaching as well as collaboration with colleagues and participation in professional learning, rather than just seeing teaching as a step towards another profession, could be a potential path to improving the state of the profession. In addition, interviewees stress the importance of community engagement in education, which could enable parents and others to recognize the challenges teachers face as well as the current innovations being implemented in classrooms. Both of these efforts may contribute to a more positive public discourse around the profession.

Relatedly, interviewees mention the need to improve the relationship between teachers, communities, and the government to counter the consistent and public blaming of each other, which prohibits constructive dialogue. Finally, several leaders discuss the extensive roster of non-academic tasks that teachers face as a critical barrier for teachers to focus on the core tasks of improving learning. A recent study by the Azim Premji Foundation (2017) illustrates how teacher absenteeism rates may be much lower than the 25 percent rate often highlighted in the public media owing to many teachers being pulled out of their classrooms for other assigned academic and administrative duties.

STIR Education and the government of Uttar Pradesh started their partnership building upon a belief that, since salary increases and other extrinsic incentives have had limited impact on teacher motivation and student learning, a more powerful and sustainable approach to improving education quality was possible. Their mission was to explore how, together, they could reignite teachers' intrinsic motivation, thus ensuring that these more motivated teachers would influence their peers in their schools. This innovative approach by the Uttar Pradesh government and STIR Education centers around teacher networks: local, ongoing professional communities of practice. Through these networks, teachers gain exposure to key teaching principles and are supported in making tangible changes in their classrooms. Teachers thereby experience a continuous cycle of learning, development, and collaboration between teacher motivation, teaching practice, and student learning. Government officials at cluster level (e.g. assistant Block Resource Centre coordinators and Nyay Panchayat Resource Centre Coordinators) are trained by STIR to run and sustain these networks.

## Education Policy and Strategy

Education, according to the Indian constitution (Government of India, Ministry of Law and Justice, 2015), is a concurrent responsibility as the central and state legislatures can devise education-related policies and pass laws. The state-level education system is further decentralized to the level of districts and blocks. District educational officers report to the state department and are in charge of implementing and supervising elementary education. Block education officers are inspectors and supervisors who focus on providing continuous academic support to teachers (Ramachandran et al., 2005, p.4). Within this context, the government of Uttar Pradesh has devised various strategies and policies to improve student enrollment and education quality, including inputs, processes, and learning outcomes Prior to the Right to Education (RTE) Act of 2009, which is a central government law, the roles and responsibilities of teachers were managed by central government orders, state-level directives to districts, or district-level officials. The RTE Act's key focus was on ensuring free and compulsory education to all children aged between 6 and 14 (Ramachandran et al., 2005, p.4).

In line with the 1986 National Policy on Education (NPE) guidelines (Government of India, 1986, p.132), Uttar Pradesh established District Institute for Education and Training (DIET) offices in each district to strengthen the technical and resource support structures for teachers (Government of India, 1986). In 1992, the District Primary Education Project (DPEP) (National University of Educational Planning and Administration, 2016) created two additional layers of academic and training support for teachers in the form

of block resource centers (BRCs) and cluster resource centers (CRCs). While the structures of DIET offices, BRCs, and CRCs were designed to provide continuous and on-site academic support to teachers, interviewees state that their effectiveness has been limited due to financial constraints among these decentralized offices to effectively support the large number of teachers in Uttar Pradesh. Additionally, interviewees cite the limited capacities and skill sets of the resource personnel to provide the necessary support and develop teachers. This is of particular concern as interviewees describe how teacher learning plays an important role in improving teacher motivation by expanding skill sets and enabling teachers to impact student learning.

Through its education policies, and particularly the RTE Act (2009), Uttar Pradesh has seen an unprecedented growth in the number of schools, classrooms, and teachers required to serve its increasing student population. In addition, several community awareness and student enrollment drives have been conducted by the state-level government over the past ten years to improve children's access to primary education. Student enrollment rates consistently outpace teacher recruitment, resulting in high pupil-teacher ratios. In 2015–16, student-teacher ratios on average in Uttar Pradesh were 39:1 at lower primary level, 33:1 at upper primary level, and 56:1 at secondary level (National University of Educational Planning and Administration, 2015). These challenges deeply influence teacher workload and the overall potential delivery of quality educational opportunities. Looking ahead, it is critical for the government of Uttar Pradesh to ensure that teacher recruitment increases more quickly relative to increases in student enrollment to thereby achieve more manageable classroom sizes. In line with earlier reflections, recruiting sufficient numbers of teachers and recruiting teachers who are to some extend passionate about teaching is critical for rapidly expanding systems in terms of student enrollment like Uttar Pradesh.

The majority of interviewees state that too often well-intended education policies have not gone hand in hand with proper implementation and consequent monitoring and evaluation, which has, in turn, limited their effectiveness. Additionally, on-the-ground realities and challenges are not always analyzed and used to influence policy design phases. Including rigorous evidence and teachers' voices in the design of education policies will be critical to ensure that well-intended strategies match the reality in Uttar Pradesh's schools. Although the government has launched state-level initiatives to involve teachers and other key stakeholders in various district and state committees to influence the design of new strategies or policies, interviewees observe that a lack of proper coordination and collaboration between various stakeholders often results in poor implementation and complicates long-term sustainability of these initiatives

The implementation of well-intended education policies is often constrained by limited financial resources and a lack of technical capacity, particularly at block level. In response, STIR Education and the government of Uttar Pradesh have focused intensively on training key education stakeholders at block and cluster level to facilitate effective support and mentorship to teachers. Key officials such as the BRCs and CRCs are trained to lead and sustain teacher networks, through which teachers collaboratively develop innovative solutions to challenges they face in their classrooms, thereby reigniting teachers' intrinsic motivation in the process. The cost-effectiveness of STIR's intervention enables replication of this approach across districts and other states.

### Teacher Career Paths, Recruitment, and Retention

*"We all together have to find solutions and need to create a system in place so as to bring accountability and intrinsic desire to improve the image of government schools."*

To obtain a position as a traditional government teacher in Uttar Pradesh, individuals must hold at least a Bachelor's degree and have completed two years of teacher training. Teacher selection is based on teachers' marks on the Teacher Eligibility Test (TET) and rankings from high school, undergraduate, and further study, if appropriate. This is not the case for non-government teachers, whose eligibility criteria are varied and often not as comprehensive. Secondary government school teachers are recruited by a committee headed by the joint director secondary using a similar ranking process, although without the TET component (Singh, Agarwal, & Mathur, 2016).

Primary and upper primary teachers are eligible for promotion after a minimum three to five years of service, which varies across districts. According to the interviewees, career progression for primary teachers in government-funded schools is often uncertain due to a lack of clear guidelines, procedures and decision-making power resting with school management committees. A primary teacher can be promoted either to headmaster or to assistant upper primary teacher. A teacher at upper primary level has only one promotional avenue — becoming an upper primary headmaster. In secondary schools, the scope of career growth is limited with most of the higher-level positions being filled by direct recruitment (Singh, Agarwal, & Mathur, 2016).

When asked about teacher career paths, the majority of interviewees express satisfaction with the existing promotion opportunities. However, they share the need for a performance-based promotion rather than an experience-based system due to school leaders' role in providing vital support for teachers to expand their competences and have a greater influence on student learning.

When asked about teacher retention, all interviewees state that due to secure and relatively high salaries, teachers generally do not want to leave the profession unless they qualify for higher civil service jobs. Teacher salaries have evidently played a critical role in recruiting relatively large numbers of teachers to the profession, and continue to be a driving factor for ensuring that teachers remain in the profession. Besides teacher salaries, however, the interviewees' reflections illustrate the desire among teachers in Uttar Pradesh to grow as professionals and to collaborate with peers. Improving Uttar Pradesh's teacher learning and development structures could thus play a critical role in simultaneously improving teacher motivation.

## Teacher Motivation

*"Motivation is an intrinsic drive towards your profession. Teachers can be motivated if the policies in the system are made in a democratic way and accountability is ensured at every level."*

In almost all interviews, leaders share that teachers who love, care for, and understand their students are highly motivated to teach, to engage in learning opportunities, and to collaborate with peers, regardless of the school environment they find themselves in. However, as one interviewee notes, "teacher motivation is an important component for making changes in children's learning outcomes, but there is no clear strategy developed within the system to increase their motivation." Interviewees suggest that too many teachers in the system are demotivated and not interested in teaching, largely due to the challenges that they face within the government system. These challenges include a lack of basic classroom infrastructure, student absenteeism, excessive administrative and non-academic work such as engagement in political elections, and a lack of collaboration among teachers. These circumstances often cause teachers to give up on striving to improve, and instead perform the bare minimum expected of their role.

Despite Uttar Pradesh's teacher motivation challenges, the majority of interviewees believe that teachers feel motivated when they are able to build a rapport with children and observe the result of their work on student learning. This was illustrated by one interviewee, who highlights that:

*There are teachers who are really good and committed. They love to see their children learning and use various types of micro-innovation, not only in pedagogy but also in creating better relationships with their students and community at large. However, the number of such teachers is less as compared to those who are not so committed for this profession, so we all together have to find solutions and need to create a system in place so as to bring accountability and intrinsic desire to improve the image of government schools.*

Additionally, teachers benefit from being able to work with education system stakeholders beyond their schools and at block level so their efforts are well recognized. These opportunities are viewed as key motivators for teachers. One interviewee explains, "Motivation is an intrinsic drive towards your profession. Teachers can be motivated if the policies in the system are made in a democratic way and accountability is ensured at every level."

Block and district officials, according to several leaders, increasingly engage teachers in the formulation of education strategies. STIR Education, in partnership with the government of Uttar Pradesh, has engaged teachers, block, and district officials collaboratively in termly meetings, during which challenges that teachers face are shared and consequent solutions are proposed. This has been highly motivating for teachers as it gives them a voice and a sense of purpose. Based on interviewee reflections, it may be important to explore a longer term, coordinated strategy for supporting teachers in rekindling their love of the profession and their school-level and, especially, classroom-based work. For Uttar Pradesh to develop a comprehensive teacher motivation strategy, working in close collaboration with its teachers is essential. A coherent strategy would need to carefully address teacher recruitment, career progression, and collaboration as these factors play a vital role in enabling teachers to improve their classroom impact. Being able to see your influence on your students' learning is critical to support teachers in reigniting their intrinsic motivation.

STIR's partnership with the government of Uttar Pradesh has centered around enabling teachers to experience "light bulb moments" of seeing children learn. STIR believes this might be a more powerful approach to improving teacher motivation than more traditional, extrinsic "carrot and stick" models. In addition, STIR and the government of Uttar Pradesh recognize the critical role of the wider system in enabling teachers to experience and, more importantly, sustain such "light bulb moments." To achieve this, STIR trains block- and cluster-level education officers to facilitate teacher collaboration within and between schools. Perhaps more uniquely, STIR also works actively with district- and state-level officials to enhance the development of a wider, more enabling, environment for teachers to learn from one another. To illustrate, district education officials in various districts have incorporated STIR's approach towards teacher collaboration formally into their structures. This in turn serves to ensure that teachers across all schools have the chance to learn from colleagues through exchange visits and other learning opportunities. In addition, at block-level, teachers have started using social media, such as What's App groups to share challenges and innovations with one another, which in turn encourages teachers to adapt their teaching practices and grow as professionals.

Nurturing and sustaining the conditions and cultures that support collaboration supports teachers in achieving a positive impact in their own classrooms. This, in turn, is thought to inspire and motivate teachers to further improve. Through rigorous external evaluations, STIR and the government of Uttar Pradesh have seen highly promising initial signs of impact of this model, particularly with regard to teacher effort, as measured through improvements in time spent teaching (or "time on task").

**Teacher Professionalism**

Interviewees describe teacher professionalism by stressing the importance of teachers' ability to impact student learning. One interviewee illustrates:

> *the completion of an assigned task with the positive spirit and impact make the word professional justified. In terms of the teacher, it's all about strengthening the child in terms of his or her learning, attitudes, and behavior so that the overall development of the child is ensured.*

Several other leaders add that key aspects of teacher professionalism, as interpreted in Uttar Pradesh, revolve around enacting day-to-day routines such as showing up to school on time, lesson planning, and an awareness of issues in the classroom and the wider school. In other words, teacher professionalism seems to be perceived as teachers' commitment and motivation to conduct their duties to a high standard.

In terms of teacher professional standards, Uttar Pradesh follows the provisions of the Uttar Pradesh Basic Education Act 1972 (Right to Education, 1972), the Uttar Pradesh Junior High School Rule 1978 (Government of Uttar Pradesh, 1978), and the Uttar Pradesh Basic Education Teachers Service Rules 1981 (Government of Uttar Pradesh, 1981). Despite teacher standards being clearly outlined in key policy documents, interviewees state that teaching in Uttar Pradesh increasingly involves a range of non-academic and administrative tasks, although it is not clear exactly what these entail. One interviewee states that there are "advanced teacher professional standards which define a teacher's role and responsibility at their workplace. But, it is not that clear to teachers [that] when they are asked to get involved in non-academic task [which] standards and performing standards [apply]." This, in turn, causes confusion among teachers as they are not aware of exactly what standards to follow.

In addition, when asked about teachers' state of professionalism, one interviewee mentions that "teacher profession is one more step ahead from the word 'professionalism' because they not only work for the system's demand but also for society's demand to enhance their children, not only in learning but also in behavior." This illustrates the high expectations on teachers to be role models for children.

The majority of interviewees state that bolstering teacher professionalism requires improvements in teacher autonomy, creativity, and leadership. Currently, these factors are all limited to the boundaries of the classroom. Enabling teachers to have a say in wider school policy and providing them with the space to contribute to the development of the school in creative ways were identified as promising approaches to improve teacher professionalism. Leaders share numerous instances where teachers, despite their limited sense of autonomy, have shown leadership and creativity by engaging the wider community, peer teachers, and education officials to collaboratively address challenges such as student attendance and retention, parental engagement in student learning, and school infrastructure.

In order to further enhance teacher autonomy, creativity, and leadership, STIR and the government of Uttar Pradesh encourage teachers to collaboratively design innovative, evidence-based practices within their classrooms and the wider school environment to thereby improve student learning. A key learning point over the past three years has been the key focus of headteachers in facilitating this process of stimulating autonomy and creativity among teachers. Headteachers play a critical role in creating a school-wide environment in which teachers feel supported and trusted to implement new ideas. Increasingly, STIR and the government of Uttar Pradesh train headteachers to lead STIR networks in their schools to thereby drive holistic, school-wide improvements.

### Teacher Wellbeing

> *"Teaching at its best arises from healthy teachers who are well rested, open minded, clear thinking and compassionate towards the challenges of learning."*

When asked about teacher wellbeing, the majority of interviewees recognize the demanding workload on teachers and emphasize the need to ensure wellbeing within the teacher workforce. Rapid increases in student enrollment have served to increase the demands placed on teachers, as one leader shares:

> *teachers are on the frontline...If they are not fit to cope with the never-ending, ever-changing series of demands and pressures they face moment to moment, they will not provide the quality teaching and learning experience expected of them. They will not be the great teacher they aspired to be when they entered the profession. The ill effects of stress on teachers are obvious and easily recognized. They are likely to be more easily agitated, less tolerant, quick to judge, and of course feel fatigued and run*

*down. Teaching at its best arises from healthy teachers who are well rested, open minded, clear thinking and compassionate towards the challenges of learning. Therefore, it is important to preserve teacher wellbeing in our system.*

The majority of interviewees emphasize that the wellbeing of today's teachers affects the wellbeing of society tomorrow. Leaders suggest that unless the wellbeing of individual teachers is improved, standards of education and the educational experience of young people will suffer, with far-reaching financial, economic, and social consequences for the nation. Several interviewees highlight how poor physical school environments lacking electrical access and hygienic toilets, as well as high pupil-teacher ratios are key challenges to teachers' wellbeing. In addition, proper pre-service training and adequate and inspirational support could influence teacher wellbeing and prepare them for their roles. When the system is successful at delivering these conditions, teacher stress could be mitigated.

Improving teacher wellbeing, according to the majority of interviewees, will require a shift to prioritize the importance of peer collaboration aimed at supporting and inspiring teachers through communities of practice. Such communities of practice should not only stimulate teachers to collaborate with other teachers horizontally, but build relationships vertically with block education officials, district officials, and others. These platforms could provide teachers with an opportunity to share their challenges with colleagues and collaboratively develop solutions to address these challenges, which could in turn improve teacher wellbeing. As teachers are already too often pulled out of their classrooms for administrative and other non-academic work, it is critical that interventions to support teacher collaboration are embedded in existing school schedules so as not to overwhelm teachers and increase teacher stress.

## Final Thoughts

Uttar Pradesh, as India's most populous state, faces an urgent learning crisis. Although teachers play a critical role in improving learning, teacher motivation remains low and needs urgent attention. Reflections from key actors in the education system, combined with a systematic review of Uttar Pradesh's education policies, reveal the potential of reigniting teachers' intrinsic motivation, or the joy of teaching and seeing one's students learn. It is critical for Uttar Pradesh to develop a comprehensive policy and implementation strategy regarding teacher motivation, with a particular focus on teacher recruitment, career progression, and collaboration. Relatively high teacher salaries have played a critical role in recruiting and retaining teachers, but not necessarily in motivating teachers once they're in the profession. It is critical for Uttar Pradesh to more carefully recruit teachers who have at least some passion for the act of teaching, for learning from peers, and for engaging in opportunities to expand their competences. By empowering teachers to increase their impact on student learning despite the many challenges faced in their classrooms, Uttar Pradesh, through its partnership with STIR Education,

could be a role model for states across India with regard to reigniting intrinsic motivation in a systemic manner. Efforts to review teacher recruitment and enabling teachers to focus on their core task of teaching (lesson planning, classroom management, instruction, student assessment) could reignite teachers' intrinsic motivation and improve the state of the profession.

Further, the effective implementation of education policies has been limited by a general lack of support for teachers to realize the objectives outlined in these strategies. Officials responsible for developing and implementing education policy need to carefully reconsider the challenges faced by teachers in Uttar Pradesh, and teachers should be actively engaged in the formulation of new policies. In order to improve professionalism, teacher autonomy, creativity, and leadership are key, both within and outside of the classroom. Peer collaboration could also contribute to improving both professionalism and wellbeing.

## District-level Study 6: Shanghai (China)

Shanghai is one of the direct-controlled administrative municipalities in China. It is located on the estuary of the Yangtze River and comprises 6,340 square kilometers. As a granted provincial administration, Shanghai is administratively divided into 16 districts. In 2016, 24 million people lived in Shanghai. As the leading national open port, Shanghai serves an Asia-Pacific financial, trade, and cultural center in the Asia-Pacific region. As a city, it strives to be recognized as an influential global city by 2040.

In terms of educational development, the Shanghai Municipal Education Committee (SMEC) is responsible for overall educational affairs in Shanghai. In 2014–15, the education system in Shanghai had 1,462 kindergartens and 757 primary and 768 secondary schools. There are also 68 higher education institutions and 29 special education schools. In 2014–15 primary schools educated 802,960 students with 51,481 teachers. Middle schools educated 426,789 students and had 37,133 teachers. Secondary schools educated 157,416 students with 16,981 teachers (SMEC, 2015).

**State of the Profession and the Public Discourse**

There are pressures arising from the high expectations of the media and parents. Influenced by traditional, Confucian concepts, the public and mass media have a high regard for the teaching profession. The media mainly focuses on positive reviews on school development, teacher morality, and their professional standards in public discourse. Moreover, there are certain specialized magazines, newspapers, and *WeChat* official accounts that report on school reforms and teacher professional development. These include *China Education Daily, Shanghai Education, WenHui Daily,* and *First Education.*

Shanghai has a stable and qualified teaching cadre with a reasonable academic training structure and professional preparation in basic education. According to some directors of district-level teachers and researchers from universities, the teaching profession is a more attractive career choice in Shanghai than many other occupations. The core competence and public responsibility of teachers in primary and secondary schools are at a high level. In recent years, the current demographic distribution of Shanghai teachers presents in a diamond configuration (see Chart 1). For example, teachers aged 30 to 49 account for 69.97 percent of all junior school teachers and 72.95 percent of those who taught in senior schools in 2014 (see Table 1 for details, SMEC, 2015).
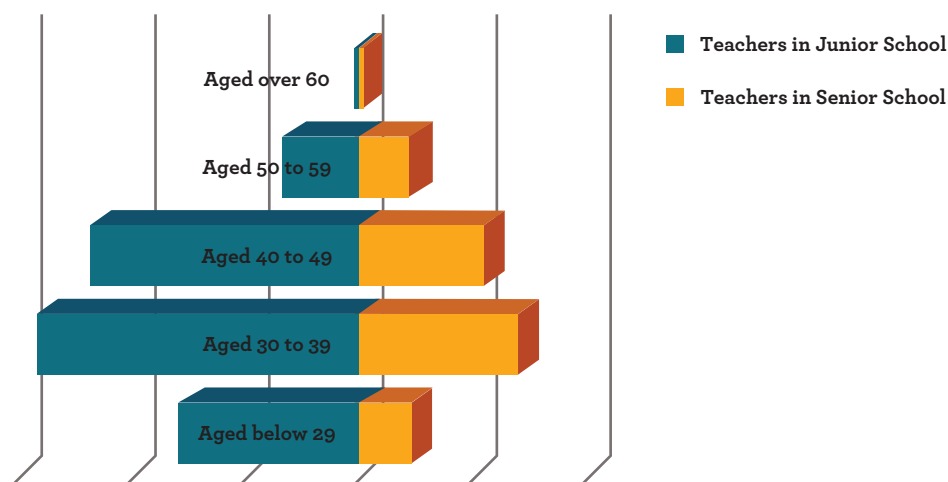


Chart 1. Structure of teaching workforce in Shanghai middle schools, 2014 (SMEC, 2015).

Shanghai teachers face a chronic workload challenge caused by high external and international challenges that necessitate long working hours. Workload pressures arise from practical demands associated with implementing the Shanghai Comprehensive Education Reform (SMEC, 2015). This reform includes the revision of the primary and secondary curricula and the implementation of the Green Index System, which established new professional competency requirements for teachers and schools. The system requires teachers to devote their skills of developing teaching materials and producing test papers.

Additionally, a new challenge has emerged in the light of the need for senior middle school teachers to develop a new repertoire of instructional skills associated with the new College Entrance Examination reform. The new teacher development requirements have led to the launch of a roster of new courses in senior middle schools (Ministry of Education [MoE], 2014). The new course selection system, similar to the "non-graded instruction" in western

countries, has three options: fixed teachers and subjects serve undecided students; students chose subjects to serve as their examination subjects; and, large-scale lectures alongside small-sized research courses. This new approach alters the traditional classroom scene; meanwhile the class timetable is changing to a student-individual timetable (Guo Hua, 2014). As a consequence, teachers have to be able to deal with the teaching tasks for varying course demands.

**Education Policy and Strategy**

A key feature of education policies in China is that they are consistent and coherent, with regional characteristics. Specific teacher-oriented policies are an indispensable part of the education system. There are many specific policy provisions related to teacher development within national, municipal, and local education policies and strategic planning documents. For example, the Compulsory Education Law of the People's Republic of China specifies the rights, obligations, qualifications, and salaries of teachers (NPCSC, 2006).

The National Medium- and Long-term Education Reform and Development Plan (2010–20) clearly puts forward guidance and requirements for the teacher workforce, including building high-quality teaching staff, strengthening teachers' ethics and morality, and improving teachers' performance (MoE, 2010). According to the planning target, a high-quality teaching workforce needs to demonstrate high moral standards, excellent professional skills, and great vitality. The Shanghai Medium and Long-term Education Reform and Development Plan (2010–20) focuses on teacher development issues such as: "We need to pay attention to every teacher's development, including building their moral integrity, innovative, spiritual, and practical ability, and make great efforts to cultivate future educators" (SMEC, 2010).

In addition, the national MoE and the local government have enacted special Shanghai-focused teacher policies and regulations. These policies fall into three categories according to the stage of a teacher's career: recruitment, training, and flow/retention. Policies related to recruitment include teacher qualifications and the teacher recruitment system. Policies related to teachers' professional development comprise teacher training policy, incentive mechanisms, and the performance pay system. And, finally, policies related to teacher flow and retention address issues including teachers' exchange strategies and the job rotation system (Du Xiaoli, 2012).

The steady development of the teaching profession in Shanghai is linked directly to the strength and coherence of these specific teacher policies. National and Shanghai-based educational policies also have a great influence on the teaching style of primary and secondary school teachers. Taking the second phase of curriculum reform in October 1998 as an example, three types of functional courses were established: foundational, extended, and research courses. This suite of courses has introduced new patterns for teaching and learning which motivate the individual orientation of both teachers and

students. In addition, these courses give full play to the role of teaching and research staff in leading the professional development of teachers and the cultural reconstruction of teaching and research.

**Teacher Career Paths, Recruitment and Retention**

The teacher career ladder is the fundamental promotion path for teachers in primary and secondary schools in Shanghai. Since 1986, China has enforced a career ladder mechanism for primary and secondary teachers that has already played a crucial role for all teachers' career development. The current teacher career ladder in Shanghai is divided into five grades. From bottom to top they are: third-grade teachers, second-grade teachers, first-grade teachers, associate senior teachers, and senior teachers with equal status to professors in university (SMEC, Shanghai Municipal Human Resources and Social Security Bureau, 2016). The requirements at each level have different detailed expectations but adopt similar indicators, including diploma level, qualification (time duration of the current position), teacher ethics, teaching performance, competency of teaching, and research outcomes. Parallel to the teacher professional-title ladder promotion, teachers are encouraged to apply for school-level administrative positions to assume greater responsibilities as middle- or higher-level leaders in schools. Teachers can choose either path based on their own interests, ambitions, and abilities.

Currently, China's teacher recruitment process is conducted in strict accordance with institutional regulations in the Teacher's Law of the People's Republic of China, under the National standard, provincial examination, county employment, and school utilization policies. National standard and provincial examination policy guides the teacher certification examination organized by the province-level education sector for applicants to the National Teacher Qualification Certificate. The Shanghai Educational Human Resource Exchange and Service Center (SEHRESC) mainly takes charge of the organization, management, qualification, accreditation, recruitment, information delivering, and regular intervals of the Teacher Qualification Certificate.

County employment and school utilization policies require schools to submit their staffing position requirements to the district education bureau. In turn, the bureau organizes teacher appointments based on selection examination outcomes and appoints certified teachers to schools in their jurisdiction. However, in Shanghai the process of employing teachers is as follows: schools post their vacant positions and organize interviews and demonstration classes in accordance with their own needs; applicants who pass the school interview and demonstration class can apply for the Public Institution Recruitment Examination, organized by the district education bureau; all candidates have to pass the psychological test organized by SEHRESC that ensure the teachers' mental health status; and schools have the final decision and autonomy over the hiring decision and offering the candidate a role in their school.

The previous tenure system for primary and secondary school teachers was abolished in Shanghai in 2012. Now teachers are required to re-register their teaching certificates every five years. According to the Interim Measures for the Registration of Primary and Secondary School Teachers' Qualifications (MoE, 2013) issued by the MoE, leaving or staying in primary and secondary schools depends on the outcome of re-registration of the five-year teacher qualification by the provincial education administration. The re-certification audit includes teacher morality, performance assessment, and teaching workload assessment, all of which are dependent on the teachers' working archives and in-service training credits. (MoE, 2013).

In addition to the above policy requirements, some school leaders also believe that the retention status of Shanghai teachers primarily relies on the following factors: passion and commitment of teachers; stability of teaching as a profession; social status and public recognition of the teaching profession; teachers' satisfaction with school culture, and the work environment.

### Teacher Motivation

Professional title, honor, performance, and compensation are four keywords that encapsulate discussions of teacher motivation in Shanghai. As mentioned above, in relation to the teacher career ladder, attaining the professional title of teacher is a goal for a large proportion of teachers. In the pyramid structure of teacher career paths, the higher up the ladder, the greater the requirements. The process of promotion and recognition can be lengthy. Often a gifted teacher will take 10 years to move from the second grade to the senior teacher title. Nevertheless, it is very difficult for most teachers to continually progress up the ladder because of the quantitative restrictions. Therefore, most teachers remain at first grade or associate senior level and hence lose their enthusiasm for promotion. The fading expectation of their promotion and development is a big hindrance to teacher motivation.

Honors and awards are incentives for teacher motivation. The Outline of the Shanghai Medium and Long-term Education Reform and Development Plan (2010–20) intends "to optimize teacher's morality, improve the professional development mechanism, strengthen teachers' responsibility and mission, set up a Shanghai Magnolia Teacher—an honorary title for hard-working and selfless-dedication in the process of teaching" (SMEC, 2010). The Shanghai Teachers' Union holds the Shanghai Young Teacher Teaching Skill Competition biennially. Another award, the Shanghai Master Teacher, has been granted by SMEC every three or four years to leading teachers since the 1970s (SMEC, 2017). It is a great honor for recognizing the professional status of teachers. By the end of August 2017, 920 teachers were awarded the status of Shanghai Master Teacher (see Chart 2). A large number of master teachers have been appointed as chairs or leaders of municipal-level workshops for teacher advanced study and training and should become mentors to a group of reserving teaching talent
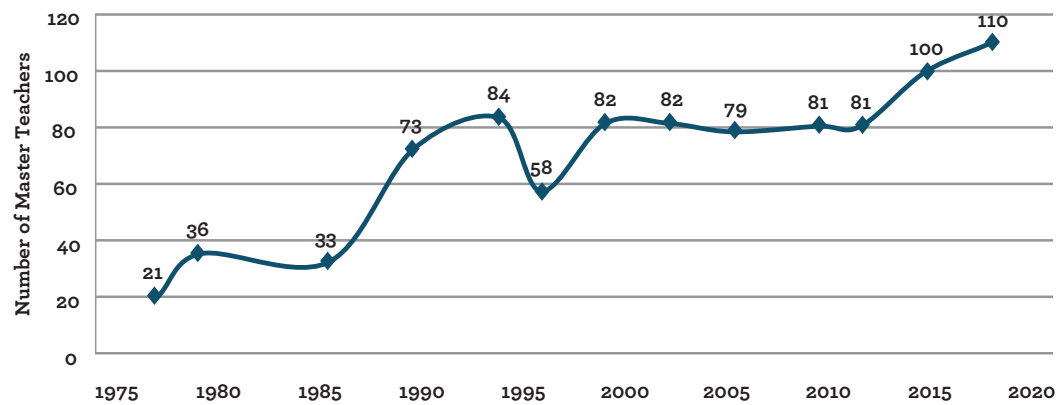
**Chart 2. Numbers of Master Teachers in Shanghai, 1975 to 2017** (SMEC 1993; 2017)**.**

Furthermore, all districts in Shanghai have five-year education development plans. In the district plans, various established awards provide honor and material incentives to teachers to be awarded additional roles, including mainstay teachers, school-level discipline leaders, and leaders of district-level teacher training workshops.

For example, the Education Bureau of Xuhui District and Xuhui Teacher College have established a development platform for teachers at different stages, including: the annual Steed Award, especially for young teachers (under 35 years of age), to lay a solid foundation for their professional development; the Cultivation Award, particularly for middle-aged teachers (above 35 years of age), to play a leading role with outstanding teaching characteristics; the Morality Award for class tutors (serving as the class teacher for more than five years), to promote the experience in class management and other aspects (Xuhui District Education Bureau, 2015).

Shanghai has a unique two-part approach to developing teacher motivation in both primary and secondary schools. One is the performance evaluation and performance pay system; the other is the special training program for high-performing teachers. In 2009, Shanghai schools launched a performance-based pay system. Since then, teachers' salaries have consisted of two parts in Shanghai: the basic wage and performance pay. The basic wage covers the post wage, scale wage, and national subsidy, which have to be based on related standards. Performance pay embraces the post-performance allowance, the actual workload allowance and the performance-related bonus. In these three sub-subjects of performance pay, the post-performance allowance is calculated according to specified standards of the Shanghai Municipal Human Resources and Social Security Bureau and the Shanghai Municipal Finance Bureau; the actual workload allowance calculates teachers' actual teaching hours and teaching loads in school; the performance-related bonus is determined by the school-level performance management scheme. All schools' performance management schemes have entailed paying appropriate bonuses to special teaching groups, such as class tutors, backbone teachers, and staff who make a specific contribution to the profession (Jingan District Human Resources and Social Security Bureau, 2009).

In recent years, there has been a growth in the enrolment of migrant students from other Chinese provinces in primary and secondary schools. Data show that 70 percent of residents live in suburban areas, of which 7.24 million permanent migrant residents account for more than 80 percent of the whole population (Shanghai Municipal Bureau of Statistics, 2010). This poses a particular challenge for education bureaus in suburban districts. Therefore, one of the main tasks of educational reform in Shanghai is to narrow the gaps between educational budgets and teachers' professional quality among different districts and different schools. To this end, SMEC has successively implemented policies to improve the retention rate of teachers in rural and suburban schools, such as raising wages and providing allowances for rural teachers, designing a series of training programs for rural teachers, and introducing a rural teacher support scheme.

### Teacher Professionalism

In Shanghai, the commitment to developing and supporting teacher professionalism is characterized by focusing on teachers' whole career development, providing diverse training forms, and empowering strong autonomy to schools.

**Teachers' whole career development.** SMEC takes top-level decisions and creates programs for teachers' professional development every five years. In October 2011, SMEC set up a Leading Group for Teachers' Professional Development Project at the municipal level. This creates comprehensive development plans and long-term mechanisms for all teachers in Shanghai (SMEC, 2011).

The in-service training curriculum strives to ensure that all in-service teachers complete 360 credit hours of training every five years. The training content closely aligns to the topics of teacher morality and literacy, teaching knowledge and skills, and practical experience (SMEC, 2016). In general, the proportion of the training courses related to the curriculum system account for 10 to 20 percent at the municipal-level, 30 to 40 percent at district-level, and 40 to 50 percent at school-based level. School-based training courses must fully reflect the training capacity of schools in Shanghai.

**Diverse in-service training forms.** At the moment, the Shanghai teacher in-service training system has been established as a layered classification system to provide programs and courses for teachers at different stages of their careers. The training system is generally designed by the Leading Group, and pushed ahead by the Shanghai Teacher Training Center (SHTTC). The classic programs for teachers at different professional stages comprise:

- *The probation teacher standardized training program*, which was originally established for new teachers. It considers beginning teachers as clinical interns. The 216 Professional Development Schools (PDS) are the exercitation base for these.

Each new teacher has to remain in their normal school as a teacher for half of the week week, and take practical activities in corresponding PDS the rest of their working time. New teachers must complete 18 key tasks embedded within the following four major themes during the first year of being hired: career identification and ethics; classroom experience and teaching practice; class management and moral education; teaching, research, and professional development experience.

- *The team development project for young and middle-aged outstanding teachers* has been implemented for growth-stage teachers. In the past three years, 32 teams of young and middle-aged teachers have participated in and explored the areas of classroom teaching, discipline research, curriculum construction, homework counseling, and teaching evaluation. All of the teams are established by means of team members' research interests. It encourages the growth-stage teachers to act as co-learning leaders to inquire and study collectively.

- *The famous teacher and famous headmaster program* was established in 2005. It is an effective way to generalize and popularize the best practices of these outstanding teachers. Over the past decade, this program has set up 31 principal bases and 118 teacher bases. These bases open up as a platform to present recognized and outstanding teaching and management practices. Participating in the research and learning at each base provides participants with a foundation for deepening their own academic ideas, developing awareness of unique teaching strategies, adopting innovative educational characteristics, and diffusing and helping other teachers to implement them (SHTTC, 2017).

**Strong autonomy of schools.** In Shanghai, external (i.e., outside the classroom or school context) training is vital. However, teaching reform always occurs in the classroom and school. It is well known that the education system is under centralized control in China. Nowadays, however, primary and secondary schools have greater autonomy on issues that are not matters of administration, such as teacher performance evaluation, teacher in-service training, and school-based educational research. As mentioned above, schools have to formulate the school-based performance bonus scheme, as well as school-based teacher training courses plan. With great power comes great responsibility. On this occasion, teaching and research culture (*jiao yan wen hua*) and school-based teacher training (*xiao ben yan xiu*) are magic keys for schools.

School-based teacher training is an efficient path for teacher professional development in Shanghai. It enlarges the school function as teachers' learning organization. The school-based training scheme has to be focused exactly on its own core issues of daily teaching and management.

The teaching and research group (*jiao yan zu*) is another influential instrument supporting and enhancing teachers' professional development in Shanghai. There is a tri-level municipal-district-school network for conducting regular teaching and research activities for all Shanghai teachers (see Chart 4). In the teaching and research group, experienced teachers mentor new teachers, and all members are offered opportunities to share their educational ideas, discuss teaching difficulties, and design teaching plans together.
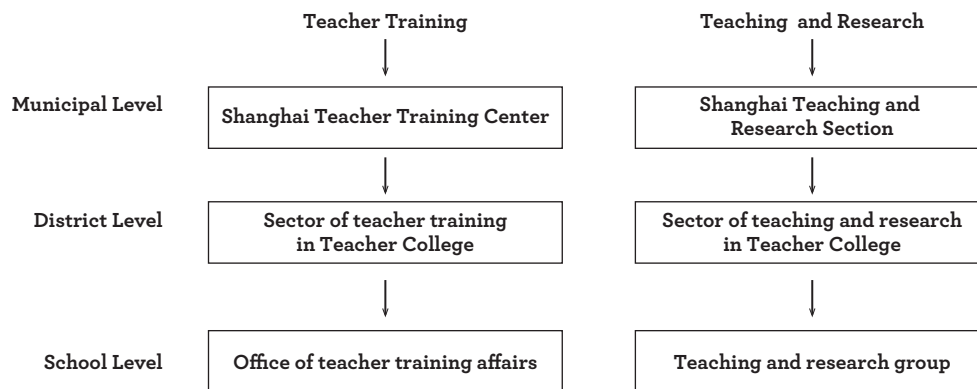
|  | Teacher Training | Teaching and Research |
|---|---|---|
| Municipal Level | Shanghai Teacher Training Center | Shanghai Teaching and Research Section |
| District Level | Sector of teacher training in Teacher College | Sector of teaching and research in Teacher College |
| School Level | Office of teacher training affairs | Teaching and research group |

**Chart 4. Tri-level network of teacher training and teaching and research activities in Shanghai**

Note: Both the Shanghai Teacher Training Center and the Shanghai Teaching and Research Section are directly affiliated institutes of the Shanghai Municipal Education Committee.

All primary and secondary schools in Shanghai strive to develop a strong teaching and research culture. Activities related to teaching and research can be organized with a fixed time and place or held anytime and anywhere. Their outcomes can be reviewed by peers, municipal and district-level instructors, university experts, or even via a self-reflection process.

Leading teacher-focused researchers have divided the teaching and research activities of Shanghai primary and middle schools into ten different models: group-learning, pilot-group, outstanding teachers guiding, combination of different subject teachers, continuous follow-up, central school good practice-diffusing, area-connecting research, problem-driven, project-cooperation, and technology-involved model. Each of the teaching and research activities has

its own merits. For example, the pilot-groups model and outstanding teachers model provide new teaching ideas or successful demonstration classes for other colleagues to discuss and imitate; the central school model and area-connecting models explore the diversity of teaching and research resources from different schools to secure their mutual complementarities. As a result, Shanghai teachers are expected to be skilled at identifying, selecting, and mixing the proper teaching and research methods to promote the development and improvement of their key competencies.

**Teacher Wellbeing**

Teachers' wellbeing is a necessary factor for attracting, stimulating, and retaining high-quality teachers. The supports contributing to Shanghai teachers' welfare are multi-faceted and, at times, complicated. They comprise:
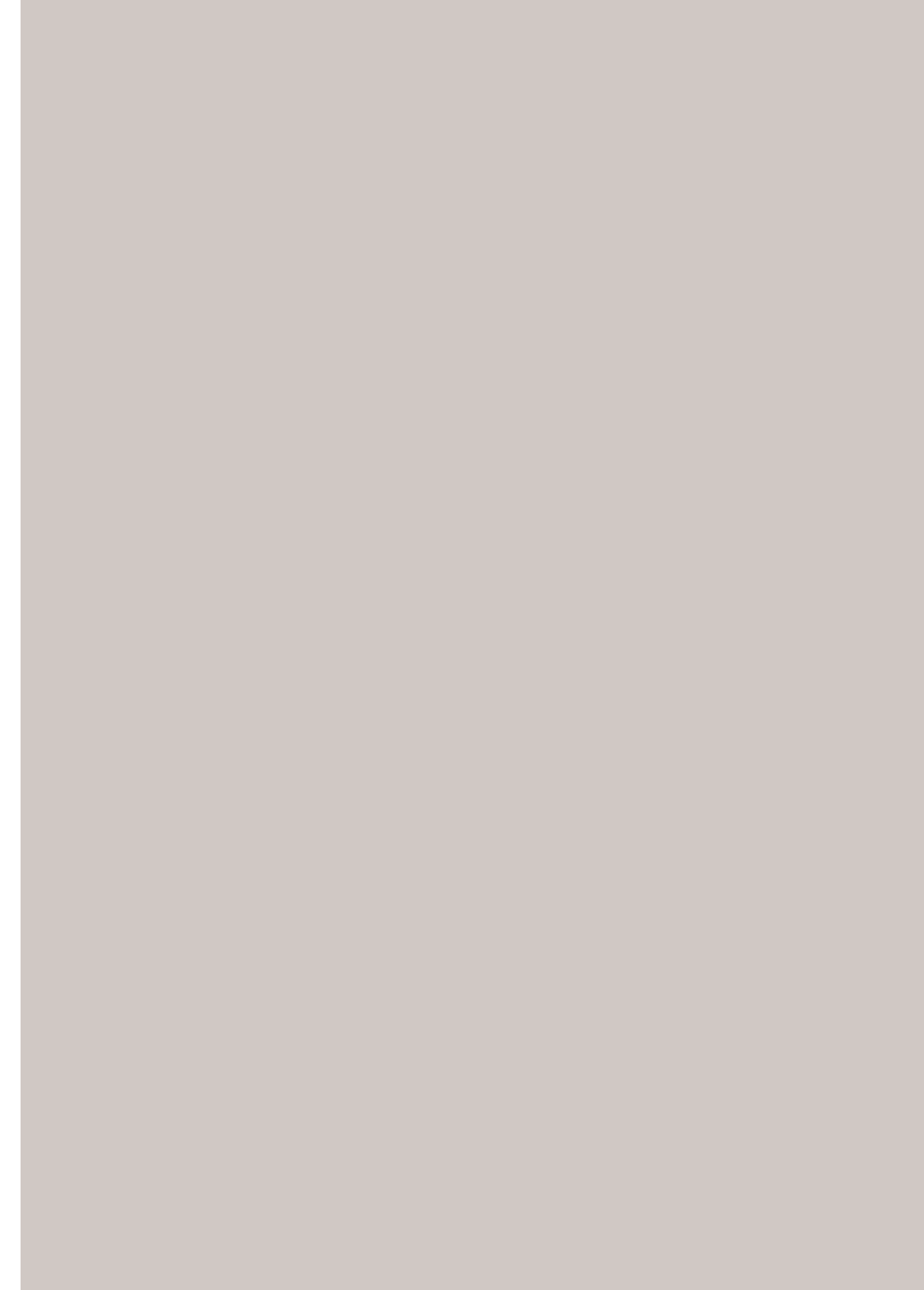
- G**overnment-provided social welfare.** Shanghai teachers are entitled to some social welfare, such as medical insurance, social insurance, retirement protection fund, housing fund, illness and maternity leave, wedding and funeral leave, regular medical examinations.

- **Exclusive teaching profession welfare.** Teachers in China, and Shanghai more specifically, receive exclusive benefits such as the opportunity to be a mentor, participate in teaching and research activities, and obtain free in-service training. They receive the teaching-age based allowance, class tutor allowance, rural teacher allowance, transportation subsidies, free school meals, winter and summer vacation with pay, holiday allowance, competition awards.

- **Spiritual welfare includes teacher self-realization**. There is an underlying belief that teaching, as a profession, provides a sense of personal and professional achievement and career happiness. The education system also strives to provide external support in the form of outside recognition, spreading educational teaching ideas, participating in the relevant awards in recognition of activities, and improving students' academic achievement.

- **Flexible benefits provided by education authorities and schools**. Local and school-level benefits may also be available to support teachers including: faculty activities, physical and mental health activities, and artistic and cultural literacy promotion activities.

**Final Thoughts**

In Shanghai, teaching remains an attractive career. This is most often attributed to the social status of teachers, the sense of personal and professional accomplishment from being a successful teacher, and welfare benefits. However, Shanghai teachers still feel pressure from the education reform requirements and parents' high-expectations. Municipal, district, and school-level authorities set clear expectations and professional development pathways for teachers in Shanghai through policy-evidence such as the Shanghai Medium and Long-term Education Reform and Development Plan (2010–20) and the Shanghai 13th Five Year Plan on Teaching Staff Construction.

Another clear strategic intervention to support teacher motivation and commitment to the profession can be found throughout the system. One such example is the triumvirate of policy actions within the Shanghai Teacher Development Framework, which is often described as the four legs of a tripod supporting teachers: teacher career paths (ladder), teacher motivation (performance evaluation), teacher professionalism (training and teaching and research), and teacher wellbeing.

Teacher career paths provide professional title ranking to teachers. The current teacher career ladder has been divided into a five-tiered ranking: third-grade teachers, second-grade teachers, first-grade teachers, associate senior teachers, and senior teachers (equal to university professor). Teacher motivation is mainly activated by performance evaluation and the performance pay system to inspire teacher development with additional incentives. Municipal, district, and school-level authorities supply both external-oriented training and internal-oriented teaching and research activity to teachers for improving their professional accomplishment. Teacher wellbeing consists of social welfare, teaching profession welfare, spiritual welfare, and flexible benefits to attract high-quality individuals joining the teaching profession.

# Reflections, Recommendations and Conclusions

I n reviewing the studies, we were struck by how many system-level strategies are designed to support teachers and their desire to improve, develop and remain in the classroom. This ambition was present in all six jurisdictions, in spite of their very different social, economic, and infrastructure challenges. While we acknowledge that recruitment is important, especially in jurisdictions with rapidly rising student intakes and with low public perception of teachers, we strongly believe and our data supports the conclusion that not enough attention is paid to motivating and developing teachers to support their full participation in their school-level lives, including collaborating with peers and informing the policies that influence their work and lives. Similarly, much policy and research attention focuses on teacher recruitment. We believe that caring for teachers and creating inspiring and supportive working conditions will support the retention of teachers we already have in our systems. To this end, drawing on our findings from across our cases and our policy and literature review, we posit eight observations with embedded policy and research recommendations that we believe will contribute to nurturing, sustaining, and retaining motivated teacher talent to support jurisdictions as they work to secure their 21st century workforces.

## Observation 1: Teacher Motivation Matters

Echoing the calls for greater attention to the working lives of teachers, the studies highlight, through empirical and policy evidence, that teacher motivation is not entirely intrinsic. Opportunities to participate in decision-making, collaboration with peers and structural elements of schools and education system coalesce to create the conditions conducive to high teacher motivation. Motivation is complex and contextually specific. Teachers at different life and career stages will also view that high motivation leads to greater retention. Teachers who are motivated want to improve their practice and stay in the classroom, even in contexts that prove increasingly challenging. As education systems throughout the world are struggling to attract knowledgeable and skilled people to the profession, retain effective teachers in the workforce, and support teachers to improve student outcomes, there is an urgent need to understand how teacher motivation can be sustainably developed. The findings from this study demonstrate that such development is a system-wide responsibility—from teachers themselves, to school leaders, to district and local authorities, and ultimately to the national systems.

**Policy recommendation 1:**
**Initiate differentiated teacher motivation supports and interventions.**

While there is agreement about the factors and conditions that support teacher motivation, commitment, and retention, there will be variations between how they are articulated by teachers in different jurisdictions. Influenced by regional location, career stage, and life events, teachers require different incentives and support across their careers. Policymakers need to develop rich knowledge and awareness of these variations and target meaningful recruitment, development, and retention interventions to teachers across their careers.

**Research recommendation 1:**
**Investigate system-level support strategies to enhance teachers' motivation.**

More nuanced research is needed to understand how education systems, local jurisdictions, and schools can support teachers to develop and sustain high levels of teacher motivation to continue to evolve their practice. Much research has been conducted on pay, incentives and other structural conditions. It is now time to ensure adequate research attention is paid to a wider range of supports that tend to generational, regional and beyond-work related factors that influence and sustain motivation.

## Observation 2: Highly (School-Based) Decentralized Systems May Need to Work Harder at Retention

Based on our wider research agenda (Edge, 2017), we have started to consider that retention may be more difficult in decentralized systems in which the primary relationship a teacher holds, and the direct paths for the teacher's career development, are all linked to one school and one headteacher. Decentralization is typically intended to devolve power and decision-making to districts, local education authorities or schools. However, an unintended consequence uncovered in our research is that educators may experience weakened connections, and possibly commitment, to the larger system. This disconnect is problematic as the larger systems, and the opportunities to work and learn across systems, can be powerful sources of motivation and professional opportunities for teachers. We observe, across our studies, that systems with at least district-level recruitment of teachers, in conjunction with other support conditions, appear to be less worried about retention. This may be because, in the longer run, teachers are able to see their career paths within a greater system-wide context. When the employer is behind the school, the fragility of the relationship between teacher and leader is less precarious and all encompassing. Connections to the wider education system also provide access to new individuals with different strengths—a valuable source of camaraderie, learning, and collaboration, all of which are sources of commitment to and for the profession.

**Policy recommendation 2:**
**Adopt system-specific strategies to mitigate possible structural retention challenges.**

Policy leaders may be able to enhance recruitment and retention by paying greater attention to the relationship between the design and structure of an education system and teachers' experience over their careers. Linked to the research recommendation below, curating a more robust knowledge base of how the structure, particularly school-based decentralization may influence how a teacher perceives and organizes their career, provide essential tools to address overall workforce management issues.

**Research recommendation 2:**
**Explore possible relationships between system-level structures and retention.**

Research examining the relationship between system structure, particularly decentralization, on teacher career progression and retention will provide essential knowledge to underpin potential policy changes or interventions.

## Observation 3: Cooperation at the Top of the System Matters

At the highest levels of an education system, it is possible to advocate and cooperate simultaneously. This work is not always easy and it will not be a frictionless journey. However, the perceived health of the educational infrastructure and the ability for governments to execute and implement policies as they are intended seems, in part, to be predicated on close ties between policy actors at the highest level of the system. Cooperation alone will not solve all educational challenges. However, we believe, after looking across these six jurisdictions, that healthy, productive, and challenging working relationships between the most influential educational organizations create a powerful synergy and focus on teacher wellbeing and student learning. Educational systems are not unlike ecosystems: healthy systems are those with strong roots and a web across actors that nourishes all involved. Every part of the system feeds the other in a healthy ecosystem. Cutting off one part, especially at the center or the highest level, results in damage to parts at the edges. Our studies highlight how cooperation at the top of the system matters. Cooperation, especially explicit and visible dedication to shared working, sets a tone and example for the other parts of the system.

**Policy recommendation 3:**

   **Make high-level cooperation between leading actors and agencies a governmental priority.**

   Visible and strong collaboration at the top of the education system may have a wider influence on teacher work and lives than is currently recognized. Policy leaders who are committed to public and high-level collaboration will set an open and forward thinking tone across their jurisdiction which may, in turn, influence public and teacher perceptions of the health of the system.

**Research recommendation 3:**

   **Broadly examine the process and impact of high-level cooperation and its potential influence for educators and educational outcomes.**

   Research into the strategies, processes and outcomes of high-level cooperation would provide helpful insight for governments and leading educational actors. Similarly, understanding more about the intended and unintended outcomes of collaborative efforts, specifically on educators and community members, may provide incentive and guidance to support retention efforts.

## Observation 4: Public Perception of Education, Schools and Teachers Matters

We believe systems benefit from healthy relationships between leading education sector organizations and actors throughout the system. We have observed that the explicit and visible cooperation between these partners may also play a role in shaping a positive public perception of the quality of education. A shared vision of an educational future, combined with an acknowledgement that each and every individual has a role to play in its attainment, may create momentum for and commitment to ambitious educational improvement. Education, as a portfolio, has a difficult role. It touches the lives of almost everyone at one point or another. It is a political hot topic in most jurisdictions, and failing public confidence in education can have many different sources and effects. The studies provide examples of how collaborative working amongst system-level organizations can enhance policy design and implementation. The studies also demonstrate how deliberate efforts between partners to strive for a more harmonious and publically supportive educational conversation are important.

For parents, sending one's child to school every day in a system where one is constantly bombarded by messages of how unprofessional, untalented, or unproductive schools and teachers are can be very difficult. For teachers, hearing messages of how desperate a system is to recruit more, or even better, teachers can be demoralizing. It is not surprising that systems with dominant narratives of failure appear to face greater challenges in recruiting

more teachers. Some would argue that creating a crisis is needed to build commitment to meaningful change. However, we argue that creating perpetual crises without any upturn in system-level ambition or optimism may be establishing conditions that will be challenging to recover. The tussle between positive narratives, good performance, and healthy retention are complicated. Some may argue that they present the challenge of the chicken and the egg: which comes first? We would argue that it doesn't matter which comes first. Unless governments and other high-level agencies embrace the need to change the narrative and create some collective hope and ambition, it may be unlikely that new teachers will join and parents will fully get behind desired changes. Public perception matters. Positive, or at least moving in that direction, perception appears to be essential.

**Policy recommendation 4:**
**Prioritize positive public perception of and confidence in the system.**

Potential and current teachers consume a constant barrage of messages in the media that can serve as a proxy for the perceived health of an education system. Negative messages about the quality of education provision and its teachers and leaders can be damaging to public confidence. Constant negative press may also dissuade even the most eager potential teacher from joining the profession. While many systems adopt the 'create a crisis' strategy to galvanize support for change, these periods of overt critique of the system and its actors should be time limited. Debate and critique is important. Positive stories that build confidence and promote high quality teaching, learning and engagement may be even more so.

**Research recommendation 4:**
**Investigate relationships between positive public perception and recruitment and retention.**

Researchers, in concert with policy leaders, can work to develop a more robust understanding of the influence of the public perception of the education system and educators on the educators themselves. Understanding the implications of the public perception on parents and students would also provide helpful reinforcement for the policy rationale to create more holistic and positive public narratives within educational reform and improvement processes.

# Observation 5: Opportunities to Collaborate at School and Across Schools Matters

Teacher collaboration within schools is an important factor in driving teacher motivation and building professional commitment. We do not mean collaboration for collaboration's sake. We mean truly meaningful teacher-led opportunities to work together, share practice, and develop relationships that drive personal and professional improvement. While teachers will gravitate to each other and possibly develop these types of relationships, our studies show that systems with deliberate and sustained strategies to support teacher collaboration within and beyond schools are taking a valuable step. Teachers with ties to their colleagues and a sense of shared purpose and momentum will be less likely to leave the profession—that is, unless the other factors supporting the work and lives of teachers, including pay, physical conditions, and other elements of personal wellbeing are not being tended to sufficiently. Many of the jurisdictions in our study have embedded collaboration within elements of initial teacher training, school-based development opportunities, and beyond-school improvement strategies. The maxim that "a problem shared is a problem halved" goes far within the education sector. Meaningfully supporting teachers to work together builds momentum and can be incredibly motivating.

**Policy recommendation 5:**
**Curate purposeful and meaningful opportunities for teachers to learn from each and with each other and inform the system.**

Given the overwhelming wider evidence, as well as illustrations from our studies, opportunities for teachers to work with each other in meaningful ways can be a helpful strategy to support teacher development and motivation. This applies in both developed and developing economies and can be a relatively low-cost solution to creating connection. Policy leaders would be well served to examine current opportunities within their systems for teachers to formally and informally work together. Finding new ways to promote teacher collaboration, in partnership with other educational organizations and agencies, would prove valuable as long as strategies have been developed in partnership with teachers.

## Observation 6: The Importance of Autonomy in the Context of Collaboration

Autonomy and collaboration are not merely buzzwords, however. They require planning and support in order to be genuine for teachers' work and careers. Strong, healthy systems understand the value of such work and plan for and promote it. Further, autonomy and collaboration cannot exist in isolation. Autonomy is valued but it does not mean working alone. Rather, autonomy means the authority to make decisions based on professional experience and is based on trust. Likewise, collaboration does not mean merely working with another individual or team. It means a genuine sharing of ideas built on trust and experience. Autonomy and collaboration do not occur spontaneously, though, nor can they occur in systems where teachers are not motivated to pursue professional goals. Thus, perhaps our most important finding is the value of connections between individual and system actors. Each supports the other. Motivated teachers need supportive systems in which to work. Education systems need motivated teachers to be effective. In jurisdictions lacking this relationship, we observe lower levels of motivation, and even perceptions of teachers' work.

**Policy recommendation 6:**
**Galvanize discussions on teacher-informed evidence-based strategies to support teacher autonomy and motivation.**

Policy leaders would benefit from a robust understanding of the current support systems available to teachers in schools, districts, regions and nations. Systems, in turn, would benefit from the outcomes of peer-to-peer collaboration when designing opportunities for and with teachers to create meaningful structures and opportunities to work together on teacher-priority issues.

## Observation 7: Beyond Ladders: Career Ladders are Helpful, but are the Only Solution?

Teacher career ladders receive much attention globally. There was talk of the importance, existence, and absence of teacher career ladders in all our jurisdictions—sometimes all at the same time in the same jurisdiction. While ladders provide clear and often linear paths of progression, these are not always possible in a jurisdiction and may also not be desirable. Emerging career theory suggests that younger teachers and leaders may want to have different careers involving lateral moves to different schools, secondments, and sabbaticals. Careers for the younger generations of educators are as much about living lives beyond the school gates as they are about being a successful and motivated professional. We believe that systems that understand these

changes, the need for clarity around possible paths, and flexibility in how to travel them will be the most successful. Individual success and system-wide success may not be predicated on one clear professional pathway. Rather, from our evidence, clarity about the possible pathways, rewards, and opportunities to learn, grow, and contribute may be enough to keep teachers in the field. We believe each system should build on its often robust recruitment efforts to develop equally robust retention strategies that carefully acknowledge the role that generation and life-stage will have in choices teachers are making both personally and professionally.

**Policy recommendation 7:**
> **Modernize career structures and strategies that reflect the needs and desires of the newer generations of educators.**

New generations of teachers require new career structures and pathways. If they don't find them, they will create them themselves. Often, these new pathways will lead beyond teaching, as evidence by high attrition rates in many countries. Conversely, more experienced teachers also need differentiated support, encouragement and pathways. Systems that begin to reflect the changing nature of the public sector workforce may with the battle to retain teachers.

**Research recommendation 5:**
> **Develop a richer knowledge base of how generational, life course and jurisdictional factors influence educator career motivations.**

To support more differentiated teacher career strategies and incentives, policy leaders require more robust and jurisdictionally focused knowledge of teacher career motivations in relation to generational and life course patterns.

## Observation 8: One Size Does Not Fit All When It Comes To Incentives and Rewards

We believe that teachers' work cannot be wholly incentivized using traditional reward and punishment models. As noted throughout, it is becoming increasingly important to consider and support teachers' intrinsic motivations to develop and remain in the profession. Similarly, the same incentives will not work for every teacher. Sophisticated policy responses call for a wide range of incentives, and not punishments, that build professional practice. As demonstrated by the STIR partnerships, actors providing solutions to these challenges need not always come from within the system—if they are prepared to work in partnership with the system in support of teachers. Different generations of teachers may also demand different types of incentives and rewards to balance not only their different life stages but also their different approaches to work/life balance, work, and their careers. Finally, systems also have a role to play in creating incentive and reward structures that work and are reflective of individual and collective needs. Systems frequently see their

role as providing incentives for teachers to improve—whether in the form of pay or professional development. While such incentives may serve as a lever for initial change, systems play a vital role in creating the conditions that support professional collaboration. Our investigation into six vastly different jurisdictions gives flesh to this concept. Systems must continue to provide support for teachers beyond this initial investment. Again, we found that in the strongest systems, investment in long-term professional development led to higher levels of teacher motivation.

**Policy recommendation 8:**
**Differentiate and innovative when seeking solutions to teacher motivation and retention challenges.**

Policy leaders would benefit from creating nuanced and informed knowledge of teachers in their own jurisdictions and the relative incentives and conditions that would support recruitment, development, and retention. Sophisticated responses to teacher recruitment and retention challenges will become increasingly mindful of how teachers at different points in their careers and life course are inspired and motivated.

## Observation 9: Strategic Collaboration Support Design and Implementation of New Policies

Within our studies there are systems that have very deliberate and practical strategies for bringing high-level stakeholders together to reflect on, design, and plan new or revised policies. Consultations are not just an act of asking questions but are essential in brand-building, forming relationships, and creating new opportunities for implementation. Developing a habit of policy consultation and roll-out serves to foster an awareness amongst stakeholders, educators and the public that there is a logic behind each policy and its development. Of course, this will not be the case all the time. However, it is worth considering, in each jurisdiction, what the policy habits are and how this influences policy design, communication and adoption. For example, if there is low or no consultation, little consideration of the pace of implementation, sequencing and timing, stakeholders may not know what to do and how, let alone be committed to doing what is planned and expected. However, if jurisdictions start to create a positive policy habit, with a set of sequenced actions that bring stakeholders together to find solutions rather than combat the outcomes, it can be highly productive. We believe that jurisdictions that create clear guidelines and share the narrative of how policies and new programs are rolled out will ensure that they travel farther and are embedded more deeply into the system. A few well-sequenced and politically savvy and consultative steps could create a drastic new opportunity and policy future—if jurisdictions are willing to change the narrative and take a chance.

**Policy recommendation 9:**
**Create positive system-wide policy habits and expectations.**

We believe if jurisdictions start to create positive policy habits, with a set of sequenced actions that bring stakeholders together to find solutions rather than combat the outcomes, it can be highly productive. Jurisdictions that create clear guidelines and share the narrative of how policies and new programs are rolled out will ensure that they travel farther and are embedded more deeply into the system. Education systems interested in adopting this approach would be well served to reflect on their current policy habits, including pace, timing, consultation, and communication.

## Conclusions

The opportunity to explore the education policy and practice context of one jurisdiction is an honor. Working across six countries, province/states, and districts simultaneously is an honor and an adventure. When we set out, our intention was to understand more about the structures and systems that influence the work and lives of teachers. We wanted to venture into jurisdictions that are rarely studied as well as those that are always featured in global discussions. Our choice was partly to demonstrate that it is possible to learn about and absorb the lessons from every jurisdiction. We also wanted to test our own assumptions by conducting, almost, a system- and policy-level health check of the teaching profession. We visited jurisdictions in high and lower income countries. While there are radical differences in the opportunities and challenges facing their education systems, they all share the essential need for a strong and motivated teacher workforce to help deliver their educational ambitions.

**Our Next Steps with WISE to Support the Project**

For our IOE UCL and STIR teams, gathering the evidence for this report is only one strand of how we intended to contribute to the discussions and actions related to the nine observations above. At IOE UCL, with STIR support, through our website we will be curating a series of Thought Leader interviews and blog posts from across participating countries and will also include other leading thinkers and doers on motivation and retention in the education sector. All resources will be available on our website, which will launch in February 2018. Finally, STIR colleagues, in collaboration with leading economists and officials from the ministries of education in India and Uganda, are developing a business case for teacher motivation, which they expect to finalize by January 2018. The business case will explore the short- and long-term economic benefits of investing in teacher intrinsic motivation. It is also intended to support governments and organizations with a practical roadmap towards financing, implementing, and measuring effective approaches to improving teacher motivation and thereby impacting student learning.
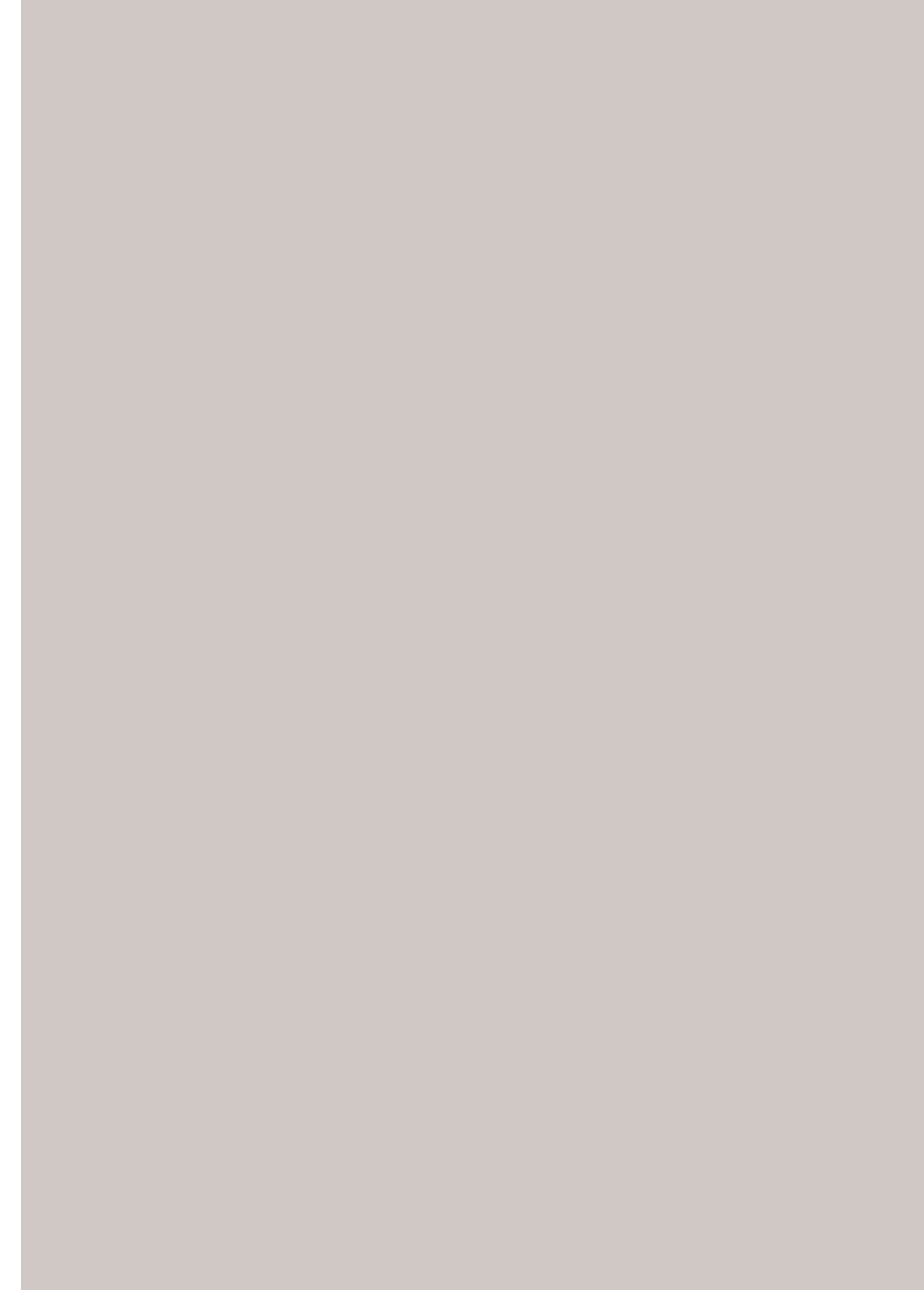
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## About UCL (University College London)



Founded in 1826, UCL was the first English university established after Oxford and Cambridge, the first to admit students regardless of race, class, religion or gender, and the first to provide systematic teaching of law, architecture and medicine. We are among the world's top universities, as reflected by performance in a range of international rankings and tables. UCL currently has over 35,000 students from 150 countries and over 11,000 employees. Our annual income is over £1bn. www.ucl.ac.uk

## About UCL Institute of Education

The UCL Institute of Education is a world-leading centre for research and teaching in education and social science, ranked number one for education worldwide in the 2014, 2015, 2016 and 2017 QS World University Rankings. It was awarded the Queen's Anniversary Prize in 2016. In 2014, the IOE secured 'outstanding' grades from Ofsted on every criterion for its initial teacher training, across primary, secondary and further education programmes. In the most recent Research Excellence Framework assessment of university research, the IOE was top for 'research power' (GPA multiplied by the size of the entry) in education. Founded in1902, the Institute currently has more than 8,000 students and 800 staff. In December 2014 it became a single-faculty school of UCL, called the UCL Institute of Education. www.ucl.ac.uk/ioe

STIR is a not-for-profit organisation registered as a charity in the UK. The team is a vibrant group of 140 professionals working in 7 offices: London, Delhi, Lucknow, Bangalore, Kampala and New York. For the last six years STIR Education has been working to address a key question: how to re-kindle the intrinsic motivation at scale among the current teaching force. In India and Uganda STIR has so far impacted 75,000 teachers and 2.6 million children through the building of teacher networks (local, ongoing communities of practice) that develop the areas of autonomy, mastery and purpose among teachers, as well as improved classroom practice.

Rigorous independent evidence on the STIR approach shows significant positive effects on teacher motivation and effort, and on student learning, and we seek to further increase impact. Additionally, this evidence shows that every dollar invested in the STIR intervention yields governments 7 dollars in increased teacher effort, and over 100 dollars from improved learning levels of citizens. Governments in India and Uganda have asked STIR to support them to impact 1.2 million teachers and 60 million children over the next five years, which we're currently working towards. By 2030 we hope to provide 500 million children with 12 million intrinsically motivated teachers, who help them realise their full potential. For more information on STIR and ways to engage with our work, please visit www.stireducation.org.

# WISE

world innovation summit for education

مؤتمر القمة العالمي للابتكار في التعليم

An Initiative of Qatar Foundation

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

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

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