

System scaling in Delhi

A 'learning partner' formative evaluation of STiR Education's Intrinsic Motivation model

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Education Development Trust

At Education Development Trust, we have been improving education around the world for 50 years. We design and implement improvement programmes for school systems and deploy specialists to provide consultancy services internationally.

Our work is informed by our continually refreshed body of public domain research that focuses on the bright spots in education, from education authorities as diverse as those in Vietnam, Kenya, England, New York and Dubai.

We work to bring about system change, combining specialist education expertise with the ability to deliver reform at scale. We partner with policymakers and practitioners to help them understand the drivers of educational improvement in their context, working to affect policy, financing, pedagogy, practices and culture to bring about wider system change.

We have a long track record of driving education impact in diverse settings. In the UK, for example, we worked with every primary school classroom in England from 1996 to 2005 to improve the pedagogy and the quality of children's learning through the National Literacy and Numeracy Strategies. In Kenya, our DFID-funded Girls' Education Challenge programme has led to improved learning outcomes for 90,000 marginalised girls through a holistic approach to change culture and behaviour at district, classroom and community level. In post-genocide Rwanda we helped to deliver system change and the country's first Education Sector Strategic Plan; today we work with all of the 2,500 government-funded primary schools in the country to improve learner outcomes in English and mathematics.

We are a not-for-profit organisation and we are driven by our values of integrity, accountability, excellence and collaboration.

STiR Education

It is a moral and economic imperative that every child, everywhere, has a teacher who cultivates the joy of lifelong learning. STiR Education is an international NGO that supports education systems to ignite the intrinsic motivation of their teachers and officials, through teacher networks. This year STiR is impacting 200,000 teachers and six million children, through supporting the national education system in Uganda and four state education systems in India. There have been exciting signs of success: for example, this year STiR's work across all 1,050 secondary schools in Delhi contributed to the state achieving its best ever academic results.

By 2030, STiR's aims are that 300 million children will have an intrinsically motivated teacher and that education systems worldwide will recognise their ability to develop this critical profession.

STIR is supported by private foundations such as Echidna Giving, Mastercard Foundation, IKEA, UBS Optimus and Dubai Cares. Sharath, STIR's Founder & CEO, received an honorary doctorate for his contribution to global education, and is a member of the Education Commission's high level steering group on workforce issues.

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Abbreviations and acronyms

APS	Affordable private schools	
ART	Academic Resource Team	
CPD	Continuous professional development	
DDE	District Director(ate) of Education	
DfID	Department for International Development	
DIET	District Institute of Education and Training	
KPI	Key performance indicator	
мт	Mentor teacher	
NGO	Non-governmental organisation	
RCT	Randomised controlled trial	
SCERT	State Council for Education Research and Training	
SMC	School Management Committee	
TDC	Teacher Development Coordinator	

Executive summary

Learning from system scaling

STIR Education (STIR) has recognised that, in many education systems, lack of teacher motivation has been a key factor driving the global learning crisis. It has developed an Intrinsic Motivation model to tackle this crisis, designed to reignite a 'spark' in teachers and to build on this spark in order to help them improve their classroom practice.

STiR has been delivering its approach in Delhi since 2012, where it started with a small-scale pilot in around 100 affordable private schools (APS). Through this pilot, the promise of STiR's model soon became apparent, with its interim randomised controlled trial (RCT) results demonstrating both increases in teachers' motivation and student outcomes.

While this success provided STiR with the evidence and confidence it needed to expand, its initial plans were modest: a gradual scaling of the programme to a few hundred schools. The Delhi government had other plans, however. It brokered a partnership with STiR that would see the Intrinsic Motivation model implemented in every secondary school across the state of Delhi: more than 1,000 schools in total.

Following a very short design phase, this journey to scale in the Delhi system has been rapid, with the model being applied to all schools almost overnight. To ensure that the learning from rapid scaling could happen quickly, STiR invited Education Development Trust to work as a learning partner: a critical friend with two purposes. First, to provide meaningful support and challenge to STiR throughout the initial scale-up process; second, to capture wider lessons on scaling for all those interested in scaling education interventions.

Purpose

The purpose of this report is to share lessons from this 18-month learning partnership. Chapter 1 reviews the current scaling literature and draws out some key principles for so-called 'system scaling'. Chapter 2 describes the background to STiR's model and its scale-up in Delhi and outlines the learning partner methodology. Chapter 3 draws out key lessons on the education workforce reforms at the 'middle tier' that enabled system scaling. Chapter 4 focuses on headteachers. Chapter 5 draws out the wider lessons from STiR's scaling journey. Finally, Chapter 6 summarises and provides a set of recommendations for STiR's continued success.

Findings

Leading change: developing workforce capacity at the middle tier of the system

STiR's scaling model is predicated on delivering through the system, not just working alongside it. There are no parallel programme delivery structures: STiR works directly with system level roles at the middle tier, including Teacher Development Coordinators (TDCs) and Mentor Teachers (MTs). The aim is to build a deep sense of collective responsibility for changing the system. In other words, STiR aims to spark mindset and culture change at system level, as well as at teacher level.

To understand high impact scaling models, we therefore need to go beyond understanding school level interventions: we need to understand more about 'what good looks like' for these system level roles. The research has generated a range of insights in this regard.

- 1. When working at scale, innovation in workforce design is as important as the intervention itself. Our analysis shows how STiR and the Delhi government have developed new kinds of roles at the middle tier to set up and deliver large-scale culture change. The TDC and MT roles are different to traditional middle tier or programme delivery roles: they are network leaders, working collaboratively across schools and with teachers to improve their practice. This report looks at these workforce innovations and how the roles have been designed to support change at scale.
- 2. Building workforce and system capacity is not just about new roles and structures: developing the right culture and mindset is critical. Getting the design right for new system level workforce roles is not enough. Our analysis shows that the highest performing TDCs and MTs were differentiated by a clear set of skills that supported them to lead change in their schools. This report encourages scalers to think beyond the 'hard wiring' of role design and workforce organograms, considering the mindsets and competencies that will be critical to scaling success.
- 3. System level capacity is a leading indicator for impact and should be tracked over time. STiR paid close attention to workforce capacity at system level from Day 1 of the scaling journey. When scaling, it can be easy to focus on the recruitment of new posts and the quality of school level interventions. This report encourages scalers to learn from STiR's approach and to consider ongoing analysis of workforce capacity as important management information.

Understanding the crucial role of headteachers

Our early analysis showed that, although not an explicit focus for the programme, engaging headteachers was a lynchpin of success. This report looks at what can be learned from the most engaged headteachers when scaling an education intervention: what are these headteachers doing to embrace change and to embed new ways of working? Taking a 'bright spots' approach, a later phase of the research explored the attitudes, beliefs and practices of three highly engaged headteachers. Despite their very different contexts, three common beliefs emerged.

Beliefs and attitudes of highly engaged headteachers in Delhi

Buys into the TDC programme to support a strong existing vision for change

Sees the TDC as part of a coalition for change, and distributing leadership across teacher leaders

Believes in prioritising professional development and growth

STIR can now use this information to inform how it engages with headteachers going forward. Some key guiding questions might include:

- How can STiR use this emerging framework of beliefs, attitudes and behaviours to support and foster these behaviours in other headteachers?
- How can STiR broker more active engagement with headteachers given that they are currently provided with support by another NGO?
- Can further 'nudges' or light touch interventions support these behaviours?

Key scaling lessons

1. Successful scaling partnerships do not always feel easy

The Delhi government's approach to commissioning has been driven by a clear vision for commissioning and partnership. However, successful collaboration has required skilled management from both parties, alignment of values and purposeful re-negotiation throughout the scaling journey. Our analysis suggests that a number of complementary qualities and ways of working have been critical to the successful partnership.

Key questions for scalers:

- What skills and values will your partnership need to survive the scaling journey and how purposefully are you cultivating them in your organisation?
- Are the terms of your partnership fit for a complex scaling journey? Are they flexible enough to support the challenges and risks of scaling?

2. 'Scaling an attitude' is not the same as 'roll out'

Scaling new practices requires a different management approach from rolling out or disseminating an intervention. Deep scaling requires increasing willingness to implement adaptive management, and a willingness to encourage and learn from 'positive deviance'.

Key questions for scalers:

- How are you building ownership of interventions and new ways of working?
- What is your attitude to intervention 'fidelity' and what underpins this?
- How are you and your partners explicitly defining, reinforcing and revisiting the values that will underpin your programme?

3. Build a broad coalition for change

All scaling partners will have to respond to changes in the external political environment that they are in. This puts wide-reaching relationships with commissioners and government bodies at the centre of success for scaled programmes.

Key questions for scalers:

- Who are your key advocates in the system? What risks to your programme would be posed by their departure and how can these risks be mitigated?
- How can you institutionalise ways of working, so that they are less dependent on individual support and can withstand storms of policy change?

4. It's not always obvious where the power lies

In political economy analyses are often highly theoretical, based on organograms or 'official' descriptions of roles and accountabilities that bear little relationship to the facts on the ground. No amount of initial pre-programme analysis can reveal the reality of hidden powers and accountabilities.

Key questions for scalers:

- Do you understand the day-to-day challenges for key role-holders and the barriers they face?
- How are you refreshing your political economy analysis to encompass ongoing changes to the political landscape?
- How are you using these new understandings to 'course correct' your programme delivery and partnerships?

5. System alignment is a marathon, not a sprint

With system alignment, the challenge for scalers is in understanding where their organisation or interventions fits: when to be influenced to align with the existing system and when to 'hold their nerve' on an existing programme model, despite a lack of alignment.

Key question for scalers:

- What are the 'non-negotiables' or the core of your offer?
- Do you have clear reflection points during your scaling journey, to help your leadership team be intentional about mission creep or pivot points?

6. Quick data is not bad data

Rapid, SMART, user-generated data collection, even if imperfect, can still drive important changes in behaviours and increase demand for ever-smarter data. This is more sustainable if it fosters users' willingness to understand, generate and use data.

Key questions for scalers:

- How are people going to use the programme data you generate? How can you make it interesting and relevant, so that they start to ask for improvements and more insights?
- How can you build a culture of data-driven decision-making, incorporating data into programme management meetings and wider education management meetings?

7. Volume should not overshadow quality

It can be beneficial to focus first on reaching scale and then allowing quality to catch up over time. This allows scalers to see how the model works in practice. After some time, implementers will be better placed to home in on improving quality and understanding how to do this in a personalised and bespoke way.

Key questions for scalers:

- How are you designing your monitoring processes and partnership discussions to open up deeper discussions about the quality of your programme, over and above the monitoring of Key Performance Indicators (KPIs)?
- How can you build in 'pause points' where you may decide to slow down the pace of scaling in order to refocus on quality?

8. Blurred responsibilities are not necessarily a problem

Future programmes should work with donors and governments to create system-level theories of change that are comfortable with a gradual blurring of role responsibilities, and their implications: increasingly expansive – even overlapping – roles of different actors; and a decreasing likelihood that an evaluation can ever untangle the impact of different interventions.

Key questions for scalers:

- Have you built a system-level theory of change that enables collective accountabilities for shared outcomes?
- How are you collectively celebrating achievements against these outcomes, so that all parties are recognised for their contributions?

CHAPTER 1 Scaling within an Education System

Scaling as a social process

It should be no surprise that scaling has gained increased attention in international development contexts¹. The achievement of an ambitious set of Sustainable Development Goals requires solutions that are successful at scale. While we can expect some scaling to happen organically, for the most part scaling is hard. The impact of a small or pilot intervention doesn't necessarily translate to impact when it is delivered at scale. The evidence base around success factors is growing but still contested; for instance, does successful scaling of quality learning more readily occur when new approaches and ideas are allowed to develop and grow on the margins and then spread to reach many others? Or is scaling more successful when it achieves political 'buy-in' from the start, going with the grain of the political economy? Across all efforts to reduce global poverty, ill health and inequalities – from malaria nets to micro-loans – there is also increased recognition that successful scaling is dependent on human and cultural factors that can spark changes in behaviours and mindsets. Hence, scaling is not simply sequential from innovation to diffusion. It is a reiterative, social process that goes beyond the technical delivery models that can still dominate much of the thinking by governments and donors.

In education, the global learning crisis renders the challenge of scaling both more necessary and complex. More necessary, because the pace of improvement in learning outcomes has been so slow and has not come close to matching a huge growth in school attendance. As the global education policy debate shifts to focus on quality, and in particular on transforming teacher instruction, the key issue is not finding effective practices – 'bright spots' are often easy to find – but working out how to spread and scale these practices to every classroom². However, in comparison, for instance, to health, a myriad of promising and effective local education interventions have struggled to scale effectively or systemically ³. This may be because the challenge of scaling in education is more complex. While all scaling is predicated on social processes, processes of teaching and learning in the deepest sense fundamentally involves the quality of human interactions and relationships. So education scaling programmes that are reliant on high-fidelity implementation may be both undesirable and unrealistic. Education scaling often fails because not enough attention is paid to culture, behaviour and mindset change.

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¹ The tools and frameworks included in the rapid review of scaling methodologies (see below) demonstrate the breadth of interest in and literature on scaling, and provide a summary of relevant literature.

² Jones, C. and Davis, M. (2018) *School improvement at scale: Getting results from a school-led delivery model.* Reading: Education Development Trust. [Available at: www.educationdevelopmenttrust.com/EducationDevelopmentTrust/files/65/65b96acb-484f-46d1-af90-

³ For a general overview on scaling see Perlman Robinson, J. and Winthrop, R. (2016) *Millions Learning: Scaling up Quality Education in Developing Countries*. Washington, DC: Brookings Institute.

For a focus on innovation, see Hallgarten, J. and Hannon, V. (2014) *Creative Public Leadership. How school system leaders can create the conditions for system-wide innovation*. Dohar: WISE.

For empirical analysis around a particular context, see Bold, T. et al. (2013) *Scaling up what works: Experimental evidence on external validity in Kenyan education.* Center for Global Development Working Paper Issue 321.

Scale and learn

These questions and issues matter deeply to Education Development Trust: from our large-scale programmes in Kenya and Rwanda, to our attempts to improve systems of accountability and inspections in Ghana, the Middle East and the UK, to our consultancy for governments and donors around the world, to our public research programme, we've gained a '360 degree view' on scaling in education – as programme designers and implementers, researchers and policy analysts. While we can't claim mastery over scaling and are 'course-correcting' along the way, we remain curious about how scaling works in education and restless to understand how scaling can be designed to catalyse more rapid improvements in learning outcomes.

We are part of a global community of curious scalers, who understand the crucial importance of effective scaling. The UK Department for International Development (DfID) is also a key player in this community, investing in the significant scaling of promising education interventions. It also supports research, including evaluation of large-scale interventions to help policymakers and practitioners to understand how scaling efforts can maximise impact, and how the system dynamics during scaling processes might inform broader education reform efforts.

Tools and frameworks

A large number of programmes, incubators, tools and frameworks have emerged from various sources to support scaling processes. Most are generic, but some are focused solely on education. Although these have potential to improve scaling processes, in total they can seem confusing, duplicating and difficult to navigate. As one education entrepreneur told us recently, 'the scaling literature is like an alphabet spaghetti of acronyms, checklists and principles – it's difficult to know where to start'.

There is a need, therefore, to not just understand the literature but also understand how it might be applied in practice. DfID and STiR saw an opportunity to combine the formative evaluation of STiR's scale-up in Delhi with a rapid review of the scaling literature. In October 2017 DfID commissioned Education Development Trust to undertake a rapid review of a selected suite of 15 published scaling methodologies, design tools to support impact at scale and tools for rapid scaling adaption. This review was designed to guide education programme leaders, funders and evaluators in their decisions about the applicability of these tools. Thus, while complementing our work with STiR and informing our approach as learning partner (see Chapter 2), this review also aims to engage a broader audience.

Figure 1: Summary of the tools in the review in the review

Scaling methodology and tools mapping



This review revealed three principles common to all these tools and one significant omission.

- Principle 1: A scaling approach should be based on a clear initial set of principles that are revisited at every stage of the process while being simultaneously flexible and adaptive. This revisiting can mitigate the risk of 'mission creep'.
- Principle 2: Systemic blockers may undermine the scaling process but these should be included in any scaling approach rather than being engineered around.
 Approaches such as phasing, piloting different iterations or delaying implementation are potential mitigation strategies to systemic blockers.
- Principle 3: Taking interventions to scale sustainably requires a culture of
 research and development. As programmes increase in size, they usually face
 'pressure to deliver' that can mitigate against further evolution. However, trialing and
 testing should remain key aspects of an effective scaling approach. This requires the
 nurturing of a culture of research and development (R&D) committed to using the best
 available existing evidence to inform programme design, and to building new evidence
 through rigorous, disciplined approaches to programme evaluation.

An urgent need to understand system scaling

Our other surprising finding was that across the tools reviewed and the wider literature on social innovation, the term 'system scaling' is often used, but appears never to have been defined. This is significant because, in our view, scalers and scaling partners need to determine their level of 'system scaling ambition' to inform their approach. Education Development Trust provides the following definition:

System scaling: An attempt to achieve systemic change by increasing the size or scope of an intervention, driving a gradual shift in culture at all levels of a system so that the impact is owned and sustained by the system itself.

This definition has two key implications. First, the 'scaling rationale' for many interventions is simply to increase the numbers of direct participants and beneficiaries. This is a valid and valuable rationale but should not be seen as system scaling. Second, many interventions may find ways to achieve systemic impact (for instance, through policy influence) without increasing their volume. Again, this may be a more rapid, efficient, strategy for impact than undertaking the effort of growing an intervention.

Our definition builds on the McConnell Family Foundation's 2015 report, which distinguished between three kinds of scaling⁴:

- Scale Out: Impacting greater numbers
- Scale Up: Impacting laws and policy
- Scale Deep: Impacting cultural roots

System scaling is an attempt to carry out all three in parallel.

While our definition (and the framework we are developing to support this definition – see Annex A) needs further stress testing in other contexts, it has already proved useful in our approach as a learning partner for STiR in Delhi. STiR's model in Delhi is, without doubt, a comprehensive attempt at system scaling. As one member of staff told us: 'At STiR, we're not trying to scale a programme. We're trying to scale an attitude.'

Scaling an attitude – perhaps a useful mantra for system scaling more generally – is a multidimensional challenge. Similar to a social movement, it requires changes to knowledge, skills and beliefs at all levels of a system: from parents and teachers, to policymakers and voters. And understanding how system scaling in education works in practice, and how the ownership of ideas is genuinely transferred and embedded, is a similarly challenging task. While the 'what works' evaluation literature on large-scale education interventions has grown in size and sophistication in recent years, there appears a dearth of evidence-informed attempts to capture how system scaling works – or doesn't work – in practice.

⁴ Riddell, D. and Moore, M. (2015) *Scaling Out, Scaling Up, Scaling Deep: Advancing Systemic Social Innovation and the Learning Processes to Support it.* J.W. McConnell Family Foundation and Tamarack Institute.

'Most of the (few) case studies of scaling that exist today focus their attention more on the product or service being scaled, rather than the process and learning that enabled that scale. As a result, the evidence base on scaling innovation is still relatively immature, and many of the frameworks in existence lack empirical grounding and validation.'

IDIA 2017⁵

It is this gap that provoked a shared interest – albeit from quite different perspectives – from DfID, the Delhi government, STiR staff and Education Development Trust, in carrying out a formative evaluation of the STiR programme. We also shared a specific curiosity about how system roles – the individuals in a system who stand between those who decide a programme can take place, and those who are actively involved in that programme – can enhance or undermine scaling efforts. Our goal was not only to provide grounded insight and support organisational learning of an intervention actively in the process of scaling-up into a system, but also to capture some wider lessons about how this was happening.

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⁵ The International Development Innovation Alliance (IDIA) (2017) *Insights on Scaling Innovation*. [Available at: https://static1.squarespace.com/static/5b156e3bf2e6b10bb0788609/t/5b1717eb8a922da5042cd0bc/1528240110 897/Insights+on+Scaling+Innovation.pdf]

CHAPTER 2 Setting the scene: STiR's scaling journey

Creating a spark: how STiR's model reignites teacher motivation

STIR Education's model works on the principle that school systems already have teachers with excellent potential to improve, but that too often the pressures of the work – administrative duties, resource constraints and lack of development opportunities or appropriate support from seniors – prevents progress.

The quality of teaching in any system is affected by a number of factors, including resources, recruitment and performance management processes, as well as political factors. STiR's Intrinsic Motivation model seeks to address this by focusing on the people within the system rather than the inputs, processes and politics around them. Its aim is to create a spark in teachers that reminds them why they became teachers in the first place: to help students learn and grow. It brings about this 'spark' by creating teacher networks. School-led meetings are designed to foster discussion about classroom practices and teaching techniques, and allow teachers to troubleshoot problems among peers. In doing so they begin to develop more effective relationships with their colleagues and their students. This can lead to increases in all the key drivers of motivation:

- **Autonomy:** promoting genuine teacher ownership of their professional development that allows them to effectively meet their needs and those of their students.
- **Mastery:** supporting teachers to develop and continuously improve their knowledge and implementation of teaching practices that have proven to be most effective.
- **Purpose:** grounding teachers' work in relation to how it promotes student learning, while building morale and camaraderie among teachers within and across schools; and ensuring there is constant reflection on the capacity of all learners to improve.

The start of a crucial and critical friendship: STiR and the Delhi government go to scale STiR's success in Delhi was first noticed during the initial pilot programme in affordable private schools (APS). An RCT of the pilot suggested positive effects on teacher motivation, increases in teaching time and even some small increases in students' mathematics scores⁶. This led to the Delhi government and the State Council for Education Research and Training (SCERT) brokering a scaling partnership with STiR. This would see STiR delivering the Intrinsic Motivation intervention across all government secondary schools in the state. This scale-up of the STiR-SCERT partnership has been rapid: it went from working in 100 Delhi secondary schools to over 1,000 schools within three months.

Education is a big priority for the current Delhi government. It spent the first two-and-a-half years in office investing in the basics (e.g. infrastructure) and then turned its attention to teaching and learning. Key to this reform is the government's recognition that, on the whole, teachers in Delhi were not deeply engaging in professional development, trying new things or even discussing ideas with colleagues. A sense of professional pride had been lost. The big vision, therefore, is to rebuild 'a culture of teaching and learning in schools'.

⁶ IDinsight (2017) *Non-Financial Teacher Incentives: Impact of the STIR program after one year on motivation, classroom practice, and student learning* [Available at: https://pdfs.semanticscholar.org/f23e/a9acfb25ee22003aefaffc17cd4e11c3a117.pdf]

The government has invested in the creation of a suite of three programmes designed to drive learning improvements across the system:

- Principal Development Programme to strengthen leadership abilities across Delhi;
- Mentor Teacher (MT) and Teacher Development Coordinator (TDC) Programmes, to leverage strength of expertise and develop Education Leaders at the school level respectively;
- Empowering School Management Committees (SMCs) Programme to strengthen community partnerships and ownership in the management of government schools.

Two other NGOs were recruited by the Delhi government to run the Principal Development Programme and the SMCs Programme.

STIR was a perfect fit to take on the teacher-focused MT and TDC programmes. First, because of a recognition that building this new learning culture is not only about professional development of skills, it is about intrinsic motivation. The Delhi government already pays teachers well. It is therefore important to tackle something deeper than pay and reward. Indeed, evidence from India and elsewhere suggests that increasing teacher pay does not necessarily lead to an increase in learning outcomes for students⁷. Second, the acknowledgement by government advisers that over the years, several traditional professional development activities had been tried, with most showing only negligible or short-lived changes in practice. Something longer term and embedded had to be implemented instead.

STiR's intervention provided a new approach, removed from traditional professional development activities and aimed at something more fundamental – intrinsic motivation. The Delhi government was also aware of STiR's strong results during its original 'pilot' phase. At the time, midline evaluation results were beginning to show improvements in motivation – and in particular, growth mindset⁸.

The terms of this scale-up were carefully negotiated. STiR originally approached the Delhi government with the intention of seeking support to expand from 100 to 200 schools. The Delhi government, however, had other ideas. It had seen too many pilot projects running in its schools over the years – some more successful than others – with too much time wasted in the 'air traffic control' task of coordinating these pilots, avoiding confusion or duplication. To them, building a culture was also about building momentum through a smaller number of larger-scale interventions. Consequently, STiR was faced with a difficult choice in Delhi: scale now or don't scale at all.

⁷ de Ree, J. J., Muralidharan, K., Pradhan, M. P. and Halsey Rogers, F. (2017) *Double for nothing? Experimental evidence on an unconditional teacher salary increase in Indonesia*. Policy Research Working Paper Series 8264, The World Bank.

⁸ Growth mindset is defined as the belief that everyone has the ability to learn and improve.

STiR chose to scale. And while the speed of this scale-up was exciting and created a buzz around the programme, there were drawbacks. The lack of 'phasing in' meant that STiR was unable to plan and systematically adapt and learn: it just had to scale and run with it, drawing on learning when it could.

Being a 'critical friend': the Education Development Trust learning partner approach STiR recognised the need to incorporate programme learning early on. It also realised that its rate of scale and small core team would make it difficult for it to step back and understand the wider lessons itself. It therefore quickly set about bringing in an external partner who could support this learning in real-time. Education Development Trust was commissioned by STiR and DfID in September 2017 to act as a Learning partner – in effect, a critical friend – to STiR. The idea was to be the informed outsider as STiR was in the thick of its first year at scale.

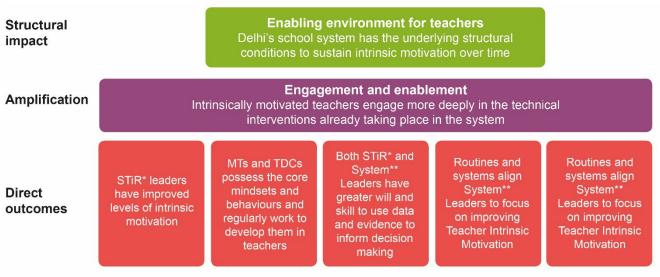
As the learning partner, we conducted a formative evaluation, assisting STiR and the Delhi government to understand the barriers and blockers to delivery. We also aimed to capture their 'journey to scale', for the wider benefit of the international education community. There is a dearth of case studies of programmes that have scaled successfully and codified their approach. Our work seeks to address this gap by drawing out key characteristics of the implementer-commissioner partnership and pinpointing the key pivot points during the scaling journey.

Our overall learning partner methodology is based on an adaptive approach, drawing on the emerging literature around rapid learning methodologies (as discussed in Chapter 1).

Based on this literature we designed the research around two rapid learning cycles, to offer ongoing insights to STiR as part of the formative evaluation approach.

Our first step of **Learning cycle 1** was to develop a system-level theory of change (TOC) to articulate how STiR's delivery model scales and embeds teacher networks in each school locality (Figure 3). Importantly, the scaling model works through the existing infrastructure and roles, such as the MT role. The full version of the system level theory of change can be found in Annex B.

Figure 2: Outcomes and impact of STiR's at-scale model



^{*} STIR leaders include mentor teachers teacher development coordinators, and DIET facilitators.

^{**} System Leaders include HoS, DDE and SCERT

This TOC then informed wide-reaching enquiry questions aimed at understanding the system, as well as the key relationships, enablers and blockers within it. The core research questions were as follows:

- 1. How is the Delhi government, in collaboration with STiR, scaling up its approach ensuring that an enabling environment is developed for intrinsic motivation within Delhi's education system?
- 2. What system-wide changes are needed for STiR to achieve its goal of creating an enabling environment in Delhi's school system?
 - **a.** What changes does STiR expect to see in the mindsets, behaviours and skills of STiR leaders?
 - **b.** What are the barriers and blockers to system-wide change and how can system leaders act to remove these?

Learning cycle 2 was developed in close collaboration with STiR and based on key findings from Learning cycle 1. The aim was to take the wide-reaching findings from the first cycle and drill down into a focused enquiry area. It was decided that the second learning cycle should focus on school headteachers, who had been identified as lynchpins of programme success during our initial research. (See Chapter 4 for findings relating to the headteacher 'deep dive' enquiry.)

Infrastructure for scaling: the Delhi education system

STiR scaled its intervention using the Delhi education system as the programme delivery infrastructure. This has meant changes and adaptations to STiR's original delivery model: while the core principles of the intervention remain consistent, the overall model for leading, quality assuring and supporting the intervention has been adapted to fit Delhi's system roles and priorities. The programme plugged in to the district level structures as follows:

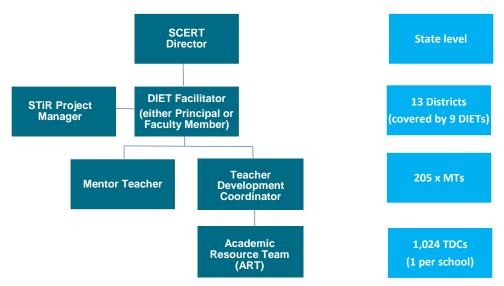


Figure 3: STiR's entry point into the Delhi education system

The programme works with existing system structures, recruiting teachers to school-led Academic Resource Teams (ARTs) – the teacher networks. The networks are led by a TDC who is also recruited from within the school staff and seconded to the role for part of their normal teaching time. Individual teacher networks form clusters of five schools, with each cluster supported by a MT. At the district level, training and support for MTs and TDCs is coordinated

and delivered by facilitators from the District Institute for Education and Training (DIET). At the state level SCERT oversees the programme, as the main body responsible for academic matters in the Delhi government.

STiR's aim is to avoid creating shadow roles or parallel structures in the system. Therefore, its main entry way into the system is via the DIET. It has a small support team of STiR Project Managers that acts as a temporary 'scaffolding' to deliver initial training and support to the MTs, alongside the DIETs, as the programme structures and roles embed. In order to ensure STiR's delivery model fits within the existing system, it worked closely with the Delhi government to make the following changes to the delivery model:

Table 1: Changes to STiR's delivery in Delhi

Pilot delivery model	System scaling delivery model
Headteachers as 'commissioners', i.e. they opted in to the intervention	No explicit headteacher engagement: intervention is no longer 'opt in' but systemwide
STiR staff (Education Leaders) lead the school networks	TDCs as network leaders: one per school
No middle tier – STiR Education Leaders support clusters of schools	The middle tier runs the programme: TDCs managed by MTs, reporting directly to District level
Intensive support and coaching for Network Leaders from STiR team	MT trained by DIET Facilitators and STIR PMs; TDCs trained by MTs and DIET facilitators, and sometimes with STIR Project Managers

What led to these system scaling choices? First, the new model built on an important new Delhi government policy as outlined above: the introduction of MTs who would be able to work across schools to provide support. Second, and pragmatically, other NGO providers in the system were providing specialist headteacher leadership support, so STiR's focus on delivering through the middle tier roles made practical sense. Third, the cascade training model was based on a core design principle: that of the STiIR programme team acting as a catalyst, rather than a major implementer.

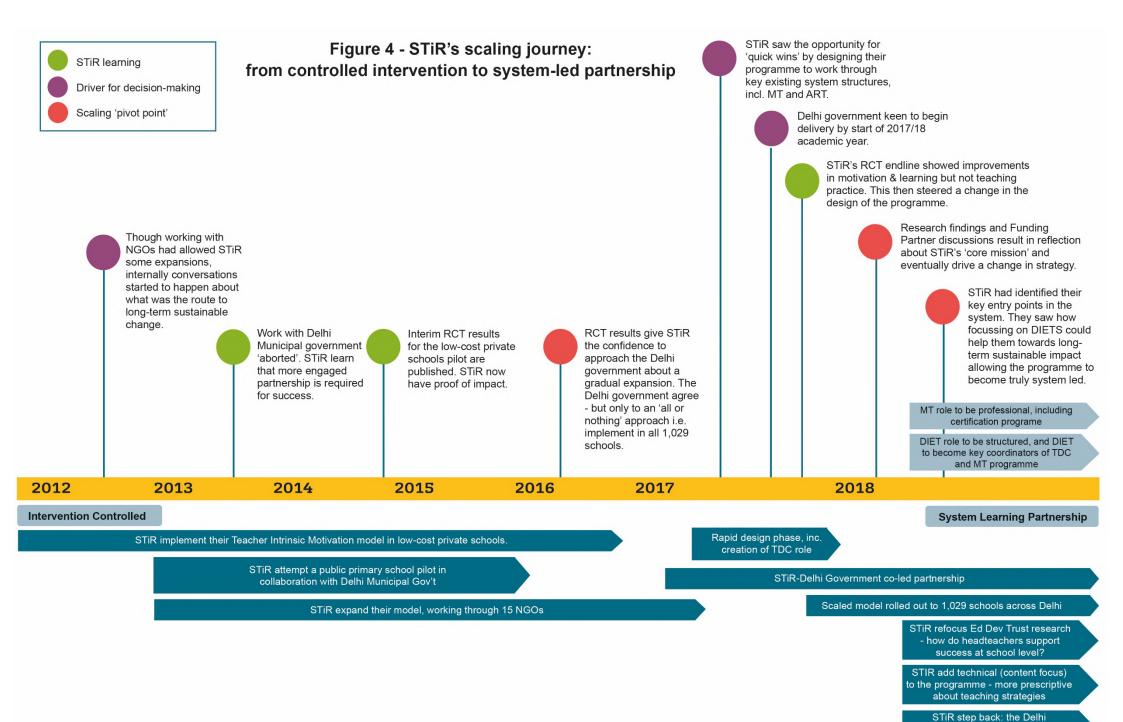
In collaboration with the Delhi government, STiR led a programme design process, using Learning Improvement Cycles⁹ (learn, try, evaluate) to decide core content for the training programmes. Two senior advisers from the Delhi government were incorporated into the design team.

STiR's system scaling journey: key decisions and pivot points

Figure 4 illustrates STiR's scaling journey, which can be characterised as a journey from 'intervention controlled' to 'system-learning' partnership. In STiR's own words, the former is a state where the success of the intervention is paramount, and where engagement with this system is tolerated just to ensure delivery at scale. The latter is what STiR terms its 'sweet spot', where the *system's* success is paramount, and the intervention plays a clear contribution to that success. This sweet spot is also where the system begins to gradually take the lead: in other words, the scaling journey is about genuine and ongoing partnership, where the balance of accountability gradually shifts from one actor to another. The diagram shows this as a linear journey (although the reality is obviously more complex than that) and highlights the points at which STiR used its organisational learning to make decisions, some key drivers behind changes to the intervention or delivery, and some of the game changing moments – pivot points – along the way.

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⁹ Note. Learning Improvement Cycles are part of STiR's core programme activities and should not be confused with the research Learning cycles which formed part of Education Development Trust's Learning Partner methodology.



government and system begin to take the lead of the programme

CHAPTER 3 System level change agents

STIR and the Delhi government have rapidly built the system level infrastructure needed to take teacher networks to scale in over 1,000 schools. This has involved rapid workforce reform at the so-called middle tier of the Delhi education system: two new school-facing roles have been created to help set up and deliver the networks. School-based TDCs support the day-to-day delivery of teacher networks and MTs oversee the programme across a cluster of schools.

In this chapter we look more closely at these roles, asking what we can learn about the system level capacity needed to go to scale. In particular, we share the findings from Learning cycle 1 which explored two questions: what are the mindsets, behaviours and skills needed by system level roles? What helps or hinders the effectiveness of these roles?

System scaling: a workforce designed to lead culture change

In Delhi, the government's vision is to drive culture and behaviour change. Policymakers aim to foster a new dialogue on teaching and learning at every level of the system – in school staff rooms, in DIET meetings, with parents – where there is active discourse about pedagogy and effective teaching practice.

'So, there was a need for some trigger or catalyst in order to change the course of discussions in the staff room from purely administrative-related topics to substantially academic related talks.'

Delhi government adviser

Culture change at scale is challenging. In Delhi it means changing the professional conversation in 1,000 schools and shifting teachers' practices in 15,000 classrooms. At pilot level, the STiR programme networks could be driven by face-to-face time with inspirational leaders and by intensive oversight from the project team. But everything changes at scale: how does a new policy initiative reach inside every classroom? How do we make sure that new practices continue 'when no one is watching'?

STiR's new programme architecture has been explicitly designed to deliver culture change at scale and to be owned and led by the system. We know that top-down, cascade training and simple dissemination of ideas is a weak mechanism for driving behaviour change ¹⁰. Instead, STiR has partnered with the Delhi government to use the TDCs and MTs as school-facing change agents. For schools, these roles are the human face of the new Delhi-wide initiative. They have a remit to:

- 1. Set up and support teacher networks and collaboration in schools.
- 2. Advocate for the new ways of working.
- **3.** Act as facilitators, working directly with schools and teachers to support and challenge their practice, and ensure teachers remain focused on improvement.
- **4.** Develop core mindsets and behaviours in teachers.

¹⁰ Hayes, D. (2000). 'Cascade training and teachers' professional development'. *ELT Journal, 54*, 135–145.

The role-holders are peer practitioners, rather than traditional government officials or deep experts: both are typically appointed from teaching roles. The design of these roles is an essential aspect of STiR's scaling model. The roles offer both reach (in terms of volume) and depth (in terms of facilitating the culture change on the ground to deliver the Delhi government's vision).

Pathways to change

One of our first tasks as STiR's learning partner was to capture this new workforce model and help to articulate how these roles were delivering change on the ground. Although early in the scaling process, the best MTs and TDCs were able to articulate their role and how they delivered impact:

Table 2: Pathways to change: How MTs and TDCs say they drive change at teacher level

Mentor Teachers	Teacher Development Coordinators
Helping to change teacher, headteacher and TDC mindsets – including building confidence to share their challenges.	Changing teacher mindsets, including a belief that teachers can solve problems of professional practice together.
Modelling the facilitation of teacher networks. Sharing their own expertise and practices. Sharing ideas across schools.	Helping to develop a clear sense of purpose in teachers, motivating them to take charge of their development.
Encouraging and supporting TDCs where they were struggling to set up teacher networks.	Setting up, facilitating and observing teacher networks in schools.
Sharing ideas for programme improvement upwards to policymakers.	Supporting and challenging practice, including observing lessons and providing formative feedback
	Resolving problems and barriers to setting up teacher networks.

Learning cycle 1 data was also used to validate and test STiR's theory of change. Early analysis provided insights into where MTs and TDCs were most struggling to make impact or, conversely, what was most supporting them in their roles. STiR was then able to use these findings, alongside other data being collected, to adapt its programme design or to work with stakeholders to minimise barriers to impact. The adjustments that STiR made, in response to these early insights from the ground, are summarised in Annex A.

The middle tier as network leaders

The creation of the MT and TDC roles represents a fascinating new programme delivery model. MTs act as network leaders to the system: they sit outside the direct line management of headteachers, working across schools to deliver a major reform programme. TDCs, too, are network leaders, acting as facilitators of peer teacher learning, in contrast to a more traditional teacher development role as an expert or trainer.

Our analysis showed that this was a very new way of working for all stakeholders: the MTs, the TDCs, the headteacher, the DIET staff and the teachers. It meant new lines of accountability, fewer reporting lines, new success criteria and new incentives for performance. We saw how different the model was to the prevailing hierarchical culture in Delhi's education system and wider society.

Our early analysis showed that TDCs and MTs faced a culture clash – challenge, resistance, misunderstandings – as they tried to work across schools and support changed teaching practices. For example, teachers could be reluctant to take guidance from someone they saw as a peer.

'In the beginning, I used to get anxious wondering how other teachers would feel if I held meetings, especially since I was their colleague and not their senior. I used to think that they might not even listen to what I have to say. However, after time, having one-on-one conversations with them changed this perspective and I realised it was just that. A perspective.'

TDC

Equally, headteachers could be wary of a new figure visiting their school and classrooms. Some stakeholders in the system – such as the tiers within the Delhi government that are concerned with more administrative or operational issues – sometimes acted as a barrier to programme impact. For instance, a lack of buy-in or understanding from DIET officials could mean the difference between an MT having the time and autonomy to have pedagogical discussions with headteachers and TDCs, and them having to prioritise other administrative tasks to meet tight deadlines.

Core competencies for collaborative leadership

These are typical challenges faced by network leaders in public sector reform. As facilitators with a role focused on peer learning and practice improvement, these system level roles need a particular set of competencies to flourish. STiR has been conscious of this from the beginning of the scaling journey. It has been curious to understand the mindsets and attitudes that need to be developed at system level, as well as the technical skills and expertise.

Through interviews with MTs and TDCs, as well as headteacher and programme staff, we were able to identify the 'promising mindsets' of some of the most committed middle tier leaders in the programme. Although early days, we were able to clearly identify an emerging set of mindsets and behaviours in these individuals that supported their successes:

Table 3: Beliefs, attitudes, skills and behaviours demonstrated by high potential MTs

Beliefs and attitudes	Skills and behaviours
A passion for teaching, building a sense of	Strong facilitation skills – not just about being
higher purpose based on improving student	the expert
outcomes	
Outward orientation – open to external ideas	Ability to build relationships based on trust –
and challenging the status quo	with headteachers, TDCs, ART members and
	STiR staff
Openness to learning and own CPD, as well	Ability to tactfully challenge – doesn't always
as a strong developmental outlook – has a	accept the status quo in school culture
hunger to learn but also wants to bring out the	
best in others	

The ability to build trust was critical to the success of the intrinsic motivation model. The MTs were building teachers' confidence in sharing their practice and working in new ways. This TDC articulated the challenge and the MTs' impact well:

'This is the main problematic thing for us: like "Oh my goodness! We are going to expose ourselves and they may point out some mistakes in us." It is very important to remove that thing first. The mentors are doing it very well. They are connecting and they are making us relax. They are helping us out and they want to know what we are doing so that they can improve on this.'

TDC

The best MTs were highly committed to the wider vision of the reforms, and told us how they would try to instill this sense of purpose across schools and teachers:

'We feel that we are not doing it just for the sake of earning some money at the end of the day. We are doing it because we want those children who are deprived, almost 90% of them are first generation learners ... we want to do something for them. So, we don't mind doing all this stuff. It's not that we need everything in black and white [to] move forward. We can move even in a phone call.'

MT

Interviewees told us that the best MTs were considered expert practitioners among their peers, but that was not enough. They were building capacity and cultivating aspiration, expectation and a learning culture in their schools. They played a large part in motivating teachers and TDCs to drive improvement and they modelled this with their own humility and openness to learning.

Our analysis showed that a similar set of skills differentiated the best TDCs:

Table 4: Beliefs, attitudes, skills and behaviours demonstrated by high potential TDCs

Beliefs and attitudes	Skills and behaviours	
A passion for teaching – and improving	Builds a sense of teacher professionalism –	
student outcomes	and high expectations and standards	
Sense of purpose and vision – sees the value	Builds trust, openness and a learning culture	
of the TDC programme	 supporting dialogue and collegiality 	
Feels highly accountable – sense of	Cultivates a culture of shared responsibility for	
responsibility and ownership of the	improving teaching practice – peer	
programme; sense of accountability to	e; sense of accountability to accountability and pressure	
colleagues for the success of teaching in the		
school		
Openness to learning and own CPD –	Solves problems – able to quickly resolve	
displays a hunger to learn and continually	practice issues	
develop		

The TDCs were clear that the TIM model of professional development was not simply another training initiative. They wanted to build a culture of continuous improvement:

'I opened my classes so that people could come and observe what I am doing with the children so that they can learn, and they can help me learn as well.'

TDC

'Learning, learning, learning; do not stop learning, keep learning; in spite of having 36 years' experience by today, I do not know anything.'

TDC

The sense of passion and responsibility for improving student outcomes was clear:

'If we want we can bring about improvement in these students, and that will only happen when we accept them as our own. So I tell the teachers that these are your own kids, treat them well ... So keep the future in mind and work towards it.'

TDC

Even in the early stages of the programme we witnessed fascinating expressions of shared professional accountability. The TDCs talked about their sense of responsibility and ownership for professional improvement:

'As a teacher I was only concerned with myself. Apart from me, only one or two other teachers, like those who had lunch with me, would share their experiences [...] and discuss lessons. As TDC now, I am talking to other subject teachers also, as to what they can do to improve the teaching-learning process.'

TDC

'With the ART, I feel an accountability to support my colleagues.'

TDC

Developing system capacity to lead culture change

What does all this mean for system scaling? For those seeking to implement a people-focused intervention at scale, these findings highlight the new considerations scalers must make when working through a system. System scaling requires a deeper consideration of workforce design: how system level roles should function; how they will add value to and support teacher learning; how they interact with the existing system; what their success criteria are; and how they will be supported and developed.

Several pitfalls and challenges faced by the MTs and TDCs are also instructive in this regard. For example, MTs told us that they sometimes struggled with a perceived lack of role definition and unclear reporting lines, leading to competing priorities (see Chapter 5). Headteachers were given the mandate to select TDCs, but in the early stages of the programme the criteria for making these appointments varied across schools: sometimes headteachers appointed TDCs based on merit, sometimes on availability, and sometimes as a punishment!

If we are to understand high impact system scaling, it seems clear that we need to understand more about 'what good looks like' for system level roles. However, STiR's experience shows us that designing an ideal workforce blueprint for system-level roles is not necessarily helpful from

Day 1. STIR took a pragmatic, iterative approach to designing, recruiting and managing system level roles. It wasn't possible to anticipate who might apply to be an MT and where to set the bar on performance, for example. Instead, STIR took the opportunity early in the scaling process to gather data on emerging good practice.

Three key lessons emerge for scalers from STiR's experience of scaling through system-level roles:

- 1. When working at scale, innovation in workforce design is as important as the intervention itself. The MT and TDC roles were a radically different kind of leadership role at the middle tier of the Delhi education system. These role-holders worked collaboratively with peer teachers and across schools to bring about changes in school-based practice. Future scalers can learn useful lessons from the smart design of these MT and TDC roles. For example, they may want to consider how practitioners can be given formal system-level roles to lead change and help influence peers. This could include nominating programme leads in each school as an advocate for change, like the TDCs. They may also want to consider how system-level roles, like the MT role, can be designed to maximise time on-site in schools, working with teachers and practitioners to support new ways of working and to spread good practice.
- 2. Building workforce and system-level capacity is not just about new roles and structures: developing the right culture and mindset is critical. Our analysis showed that the highest performing TDCs and MTs were those with the skills and mindsets to bring about change. Skills in areas such as influencing and providing constructive challenge were critical to role-holders' success. In many ways, STiR has focused management effort on cultivating these mindsets, rather than a traditional 'delivery' focus on ensuring fidelity to detailed role descriptions. Our analysis showed how important this attention to culture change was to STiR's scaling process, given that the intrinsic motivation model represented a new way of working for all stakeholders in the system. Future scalers may want to reflect on this approach to workforce reform, going beyond the design of organograms and job descriptions to consider how the right workforce competencies and skills can be cultivated to support culture change.
- 3. System level capacity is a leading indicator for impact and should be tracked over time. STiR was curious to understand system level capacity for scaling and identified a rapid early analysis of workforce capacity as a priority for this study. For STiR, it was not enough to know that 200 MTs had been safely appointed or that 1,000 TDCs were in post: it wanted to understand how engaged these role-holders were, what they were struggling with, which skills they had and what the barriers were to effectiveness. This approach offers useful lessons for future scalers. When working at scale, it is unlikely that new role-holders in the system will have all the skills and competencies needed from Day 1, so it is important for scalers to get a baseline understanding of workforce capacity, to inform professional development and support. STiR used these workforce insights as valuable management information early in the programme. Future scalers may want to consider how their management information reflects system and workforce capacity, as well as more delivery at school level.

CHAPTER 4 Putting the lens on headteachers

Headteachers' engagement as a key success factor

STiR's model is targeted primarily at teachers, and the rapid scale-up has been led through strong relationships with the upper tiers of the system – including the Delhi government and the district-level DIETs. There are no core interventions designed to engage headteachers in the STiR programme, since school level engagement is led by the MTs and TDCs and the Delhi government invests significantly in headteacher development through a wider programme led by Creatnet.

However, in our initial research, stakeholders suggested that headteacher engagement in the STiR programme was becoming increasingly critical to success as the programme scaled.

'Headteachers should be more motivated and should take active interest in the programme. It should be their priority too. Sometimes when I need the support of the headteacher, I am unable to get it. If the programme is not as important for the headteacher, there sometimes develops a tendency among teachers to not think of the programme as an important part of their work.'

TDC

During our initial research in Learning cycle 1, we identified several highly engaged headteachers. In these schools the TDCs were functioning effectively and had been given the appropriate levels of support and autonomy in order to support teacher networks. Conversely, we encountered other headteachers with lower levels of engagement and buy-in. In these schools, TDCs and MTs often found it more difficult to perform their roles.

'If the headteacher was more involved the teachers too would put the programme at the top of their priority list. If the programme is not as important for the headteacher, there sometimes develops a tendency among teachers to not think of the programme as an important part of their work.'

TDC

What can be learned from the most engaged headteachers? How do they embrace change and embed new ways of working into their school management? These were questions posed by STiR at the end of Learning cycle 1. Learning cycle 2, therefore, used a 'bright spots' approach to explore these questions, identifying three highly engaged headteachers and seeking to understand what they do in practice to support school improvement and the success of the STiR programme in their schools.

Context matters: visions for school improvement in three Delhi schools

This chapter shares the results from 'deep dive' qualitative studies in three schools. All three schools had been identified as having highly engaged headteachers and a well-embedded TDC programme. Each school was in a different area of Delhi, serving pupils with different socioeconomic backgrounds.

School 1

An urban girls' school in Rajendra Nagar district, with a long-serving headteacher. She has created a strong school ethos with a relentless focus on improving teaching and learning, but going beyond the core curriculum to support the broader well-being and social and emotional learning of her students. This strong school ethos was driven by certain challenges in her role, particularly relating to the socio-economic status of many of her students and the pressures of the extensive administrative duties required of her.

School 2

Located in a rural area on the outskirts of Delhi state. The school had suffered a recent spate of dropouts and was trying to regain its reputation in the community. The Delhi government offered additional support, including funding improvements to the buildings. This investment created additional pressure on the headteacher to improve enrolment and show results. The vision of this headteacher was therefore directed towards rapid, demonstrable improvements in teaching and learning. In his words, 'my priority is on academics'.

School 3

A large urban boys' school in south Delhi. Much of the student population came from the nearby slum areas. Many of these children were first generation learners in their families and often reluctant to attend school regularly. Parental support was also a big issue. This posed a significant challenge. The headteacher's mission was a 'school turnaround' approach using a mix of short- and long-term strategies: for example, making improvements to classroom infrastructure and, in the longer term, building a strong community spirit and culture of learning among students and teachers.

Attitudes and beliefs of engaged headteachers in Delhi

The research helped to confirm and refine our early hypothesis about the beliefs and attitudes of engaged and motivated headteachers, summarised in Table 5:

Table 5: Beliefs, attitudes and behaviours demonstrated by engaged and motivated headteachers

Attitude / belief	School-level behaviours
Buys into the TDC programme to support a	Makes a considered choice about who should
strong existing vision for change.	be the TDC in their school, adapting and
	aligning this with their own school vision.
	Actively role-model good practice by attending
	and contributing to ART meetings and
	enabling positive adaptation for the benefit of
	the school.

Sees the TDC as part of a coalition for	Uses the extra capacity from the TDC role for
change and distributing leadership across	pedagogical 'additionality' and supports the
teacher leaders.	implementation of new school initiatives that
	go beyond the 'bare minimum'.
	Builds strong relationships, in which the
	headteacher actively seeks opinions and
	advice from TDCs and MTs.
Believes in prioritising professional	Actively seeks out or creates new
development and growth.	opportunities for further professional growth
	for TDCs and the rest of the staff.

1. Engaged headteachers buy into the vision of the TDC programme, by:

a. making a considered choice about who their TDC should be

All three headteachers had a strong sense of the potential of the TDC programme to drive improvement in their respective schools. Two headteachers chose TDCs in whom they saw potential for growth, while the others chose a highly competent TDC who was able to 'hit the ground running' with ART meetings and the implementation of new initiatives in the school. For example, the headteacher from School 2 chose a young teacher who, despite being initially under-confident, rapidly flourished. The headteacher commented that he saw the benefits of the TDC training first hand.

'During these trainings it has been observed that the TDC's proficiency, efficiency and qualities have improved. Initially [my] TDC was not confident enough. Another thing was he was also not clear about his duties in the role. But as the time passed, everything became clear. He established a very good bond with his colleagues, took them in his own confidence and after taking them in confidence he shared the vision of the headteacher.'

Headteacher, School 2

In contrast, the headteacher in School 3 picked a TDC who could contribute rapidly to his mission to improve teaching, learning and the sense of community in his school.

'The TDC member of my school is an expert and so has been very useful and beneficial to me ... the main work in a leadership role is to know how to use the other members for different things.

Not everyone can do everything.'

Headteacher, School 3

These differing rationales for supporting and choosing TDCs illustrate how headteachers have successfully adapted the STiR programme to align with their own vision. This is a much more considered choice than some other headteachers we identified in our earlier research, who were inconsistent with their choice of TDC and did not align this choice with the interests of the school vision.

Headteachers were given some guidance by the Delhi government as to the characteristics of an ideal TDC. However, autonomy to make the choice of TDC lay with the headteachers, who ultimately know their context better.

b. acting as a role model for the TDC and the ART

All three headteachers offered visible support for the TDC through active participation in meetings and encouraging adaptations to fit school context.

In School 1 the headteacher herself joined the ART teacher and began actively joining in the experimentation with new teaching and learning techniques. She also used the meetings as a public forum to recognise and celebrate the work of the teachers who had tried out these new practices in their own classrooms.

This role-modelling of good practice has also proven effective in School 3.

While the headteacher was actively engaged in the programme from the outset, reports from the STIR PM indicated that the ART had initially found it difficult to accept the younger TDC as an advisory role in their school. The TDC and headteacher worked to actively change this attitude the headteacher began regularly attending and participating in ART meetings, role-modelling good practices, suggesting ideas and encouraging participation of others. The ongoing reports from ART meetings show a change in the quality of meetings over time as the headteacher worked to legitimise the role of the TDC.

Headteachers also actively engaged with the TDC programme by adapting the role or structure to make sure the programme worked well for their particular school contexts. Examples of adaptations include:

- TDC role-sharing. In one school, where teacher capacity was particularly low, the headteacher chose to share the TDC role between two teachers. This allowed them to provide quality inputs to the TDC work, without becoming overburdened or losing sight of teaching priorities.
- TDC rotation. In another school, the headteacher chose to regularly rotate the role of TDC among ART members to ensure opportunities for growth were not focused on one person.
- 2. Headteachers see the TDC as part of a coalition for change and as part of distributing leadership across teacher leaders:
 - a. using the extra capacity from the TDC role for pedagogical 'additionality'

Our early research highlighted headteachers' significant workload challenge. We found that in some schools, headteachers were making use of their TDC to try and reduce their own workload. Often this was in taking on administrative tasks. In our three case study schools, we found that headteachers were making use of the additional capacity from TDCs to improve pedagogy, rather than complete administrative duties.

In School 1, the TDC and headteacher identified a gap in the students' English abilities, as a result of discussion with the ART. Together they implemented additional English classes after school. In School 3, initiatives devised by the ART and supported by the headteacher – such as those that value student voice – have been aimed at maintaining the community spirit and enhancing the attendance and engagement of students. For example, the school has started a 'Student Welcome' initiative, devised by the ART, TDC and the headteacher based on the idea that small changes in teachers' interactions with students (such as individually welcoming them

into the school building each day) can act as a motivator. Staff had already noticed changes to students' attendance and enthusiasm.

'Suppose we want to apply something, the head of the school is very open, and she always welcome good ideas, innovations, she always welcome.'

MT, School 1

b. building strong relationships, in which s/he actively seeks opinions and advice from TDCs and MTs

In all three schools, headteachers demonstrated a highly collaborative mindset and appeared to have strong relationships with both their TDC and MT. In School 1 the headteacher, TDC and MT have recently been sourcing recording equipment to make a video of the initiatives initiated by the wider ART and the good practices of their teachers. Their collective aspiration is to boost teachers' morale (and motivation) through recognition of good work. Each person made a specific contribution: the MT was able to use contacts from outside the school to secure resources, the headteacher provided support and guidance, and the TDC coordinated and led the process.

'Yes, in the collaboration practice MT, and Headteacher and ART members, we are as a team.

Our larger goal is learning, each child can learn on their own ... as he can learn this goal, we work together and collaborative efforts is going to work this.'

MT, School 2

This is a particularly promising sign that some of the previously identified barriers to programme success can be broken down. In a system where hierarchy is strongly adhered to, this level of trust and collaboration is a vital foundation for improving teacher intrinsic motivation.

'You know, what excites me most is that I feel that I have two people whom I can share with, whom I can speak to, from whom I can get feedback, from whom I can get ideas. Sometimes you yourself feel dearth of ideas, you need someone to tell you, you know, you are not expert at everything ... Maybe I have ideas but if my mentor tells me that yes madam it is a good plan, we can do it. I feel more confident and I can do it better. That is their support.'

Headteacher, School 1

3. Headteachers believe in prioritising professional development and growth by:

a. actively seeking out or creating new opportunities for further professional growth for TDCs and the rest of the staff

It was apparent that all three headteachers prioritised the professional development of their staff. All three were proactively supporting or developing opportunities for their TDCs and ARTs to both develop themselves and other teachers. The headteacher of School 2 has created a WhatsApp group for pedagogical discussions and sharing successful classroom strategies. The group acts as an effective mechanism for showing appreciation of teachers' work and is a positive sign that the headteacher is now not only engaging in the programme, but actively seeking ways to boost the intrinsic motivation of his staff.

Conclusion: characteristics of engaged and motivated headteachers

Learning cycle 2 has shone a light on the day-to-day practices of headteachers who are highly engaged in the programme. STiR's original model of Intrinsic Motivation is based on a set of core mindsets, attitudes and beliefs. Increasingly, it has widened its focus to the behaviours of highly engaged system actors. They are currently working on an updated behaviour-led model for measuring intrinsic motivation. We have identified, where possible, the behaviours corresponding to headteachers' attitudes and beliefs.

The key question for STiR now is how this information will support it in harnessing the potential of 'bright spots' in the system. For example, how can other headteachers use this framework to help lead change in their schools?

There is also a question of how STiR negotiates any active headteacher engagement to support and align with the Delhi government's flagship school leadership programme, led by Creatnet. STiR should consider how it actively tries to engage headteachers as part of the delivery model, or whether or not Creatnet can help support alignment between STiR's intervention and its own. Alternatively, there may be smaller nudges or interventions that could influence headteachers and rapidly improve their understanding and support for the programme. These are key decisions and questions now being considered by STiR and Delhi government.

CHAPTER 5 Key scaling lessons

In Delhi, the government's vision is to create a new dialogue around teaching and learning where there is active discourse about pedagogy and effective teaching practice, supporting children's outcomes across the system. STiR's focus on change agents and fostering intrinsic motivation makes it a powerful model for achieving the government's vision for the future.

However, this model, where dialogue around pedagogy happens between peers and across traditional hierarchies, is profoundly different to the existing way of working in the Delhi education system. It is challenging to set such a meaningful culture shift in motion.

STIR has approached this challenge in an iterative manner. Once it had secured the buy-in and endorsement of Delhi policymakers, its next entry point into the system was the TDCs and MTs. Early findings showed less engagement from headteachers and varying engagement from DIETS. However, our recent findings show that this has begun to shift in a positive direction. Headteachers and DIETs have become more engaged, and the relationships between different roles are beginning to strengthen – signs the programme is beginning to embed. This is particularly true of the DIETs who, having been identified as STiR's key entry point into the system, have now begun to engage actively in building their own capacity to take on the role as the eventual intervention leaders.

There are clear lessons to be learned from this journey to success. System-wide culture change is not easy and STiR has had to be flexible along the way. Our observations, interviews and conversations with STiR and the Delhi government over the 18 months of the project have led us to eight key insights. The lessons and principles derived from these are designed to be useful for STiR, the Delhi government, DFID and a wider 'community of scaling practice': donors, governments, NGOs and practitioners.

A. Delivery

1. Successful scaling partnerships do not always feel easy

The STIR-SCERT partnership has not been a traditional government-supplier relationship. The Delhi government's approach to commissioning has been driven by a clear vision for long-term partnership. However, successful collaboration has required skilled management from both parties, alignment of values and purposeful renegotiation throughout the scaling journey. This quote from Sharath Jeevan openly describes the journey towards the sweet spot of a 'system learning partnership'.

'At times we confused our partners and supporters through the iterative journey we've been on – and in the process, even confused ourselves. And we were almost certainly too swayed by the dominant thinking in our space. But patience from donors, partners and the systems themselves has allowed us to clumsily but earnestly discover – rather than design upfront – our true sweet spot.'

STiR leadership

There are useful lessons for scalers from this experience. Governance structures and contractual arrangements have supported this way of working. STiR's work in Delhi is funded by a range of philanthropic organisations that provides a variety of perspectives and has supported a more flexible approach than a single donor can sometimes allow. Rigorous and regular programme governance supports collaborative working at the very top levels of Delhi government. However, these structures are necessary but not sufficient to achieve success. What capacity and skills does a small NGO need to go to scale in this way? What can governments learn from managing complex partnerships, at scale, involving a large number of stakeholders? Our analysis suggests that a number of complementary qualities and ways of working have been critical to the successful STiR-Delhi partnership:

Table 6: Beliefs, attitudes, skills and behaviours demonstrated by high potential MTs

STIR	Delhi government
Collaborative leadership skills – trust in partners and stakeholders, skills in co-design, etc.	A strong vision, which has held steady throughout the programme and its adaptations as it matures.
Flexibility, resilience and ability to work with ambiguity – ability to adapt and reinvent approaches to fit shifting political and delivery priorities.	A learning mindset – willingness to make mistakes and learn together with STiR as a partner, rather than 'performance managing' a contractor.
Resourceful – highly networked and able to mobilise networks to bring skills and expertise to the programme.	Confidence in trusting the agency of the system itself to solve problems.

'It is better to work at full-scale and that we would bring in the resources, we will talk to SCERTs, we will rope in DIET. In the design itself, we can create a mechanism where if there is any course correction that is required, it can be done. I asked them not to worry about things going wrong. If they do go wrong, then they will get the indication that things are not working the way they want it to. We can do the course correction, but we shouldn't shy away from the risks and this big leap.

So thankfully they agreed.'

Delhi government adviser

Key questions for scalers:

- What skills and values will your partnership need to survive the scaling journey, and how purposefully are your cultivating them in your organisation?
- Are the terms of your partnership fit for a complex scaling journey? Are they flexible enough to support the challenges and risks of scaling?

2. 'Scaling an attitude' is not the same as 'roll out'

Scaling new practices and 'an attitude' require different management from rolling out or disseminating an intervention. There are some important lessons to be drawn from STiR and the Delhi government in this regard. Throughout STiR's scaling journey we have witnessed a high tolerance for adaptation and a relaxed attitude to fidelity.

This fits well with wider thinking on culture and behaviour change. When rolling out an intervention, policymakers typically ask about fidelity. However, we know that sustainable change

happens when people take hold of ideas, internalise them and make them their own¹¹. They need to make new practices fit with their world view and their narratives. This also aligns with our growing understanding of the science of behaviour change. People commit to and enact change for their own reasons (rather than any imposed rationale), aligned to their own world view (rather than adhering to a theory of change) – and in doing so adapt, amend and repurpose the programme. Programme leaders to some extent lose control, but the result is that change is more likely to stick.

Deep scaling requires increasing willingness for adaptive management, as well as to encourage and learn from 'positive deviance'. In many ways this goes hand in hand with cultivating a culture of intrinsic motivation: programme leaders are less concerned about fidelity because adaptation and ownership are key parts of helping stakeholders feel motivated to change their practice.

Our analysis suggests that STiR and the Delhi government are modelling at system level an expectation of professional autonomy, just they as expect system level roles to nurture this in teachers through the teacher networks.

'So lot of training programmes have been organised in the past which are more generic in nature, so teachers are supposed to absorb that and then go back and see how they are going to implement it. I mean, we can look for some generic solutions but after a while you need more specific and specialised solutions and this is possible only if you have a platform where teachers can engage on a more regular basis, talk about their own context and see what can work in their context and what cannot work.'

Delhi government adviser

However, this spirit of adaptation needs to be underpinned by a strong shared set of values, continually reinforced wherever possible and revised whenever necessary. While there are differences between the Delhi government and STiR's approaches, for instance, to professional development, it is the alignment of overall values that has kept this partnership strong, despite the inevitable delivery challenges in rapid scaling.

Key questions for scalers:

- How are you building ownership of interventions and new ways of working?
- What is your attitude to intervention 'fidelity' and what underpins this?
- How are you and your partners explicitly defining, reinforcing and revisiting the values that will underpin your programme?

¹¹ Smith, M. K. (2010) *Andragogy: What is it and does it help thinking about adult learning?* The Encyclopaedia of Informal Education. [Available at: http://infed.org/mobi/andragogy-what-is-it-and-does-it-help-thinking-about-adult-learning]

B: Politics

3. Sustainable change requires a broad coalition

All scaling partners will have to respond to changes in the external political environment that they are in. This puts relationships with commissioners and government bodies at the centre of success for scaled programmes. These relationships need to be wide-reaching and not limited to one cadre of government officials or a handful of key contacts who can champion the programmes. In the case of STiR, its scaling story in Delhi started, in part, because it had some strong existing relationships with key supporters in the Delhi government alongside some strong evidence that its approach worked. This meant that STiR was able to confidently and effectively align with the system but also had a strong position and voice to challenge things when appropriate: in short, it had both visibility and legitimacy. However, recent political change put this at risk. A key adviser – STiR's main champion – lost their job and the government policies began to shift at an increasing pace in the run up to the 2019 general election. Change was rapid and unpredictable and, at some points, the continuation of support for its programme seemed to hang in the balance.

In response, STiR's Delhi team worked intensively to strengthen existing relationships with those remaining in government. They did this not only by highlighting existing progress, but also by taking opportunities to align the programme with new initiatives, such as Mission Buniyaad. They also began to build new relationships at all levels, including both civil servants and politicians. While not all of these new-found friends will be champions of STiR – that level of support takes time – they now understand and to some degree support the programme. In building this broad coalition of friends, STiR has aimed to be a fixed point amid the 'storm of policy change'.

Key questions for scalers:

- Who are your key advocates in the system? What risks to your programme would be posed by their departure and how can these risks be mitigated?
- How can you institutionalise ways of working, so that they are less dependent on individual support and can withstand storms of policy change?

4. It's not always obvious where the power lies

The literature on both scaling and system reform is clear that it is often political factors, not the amount spent or technical quality of programmes that shape development impact¹². Despite the pace of scale-up, STiR's original scaling model has shown a sophisticated awareness of the political economy of Delhi's education system – the many actors, each with their own set of incentives power dynamics and failings.

However, initial political economy analyses are often theoretical, based on organograms or 'official' descriptions of roles and accountabilities that bear little relationship to the facts on the ground. In the case of Delhi, our early research brought to light the importance of the middle tier, those roles between teacher and government policymakers. While they may appear simply as passive elements in the delivery chain, in reality these actors, acting as 'street level bureaucrats', have significant agency over how any programme is translated into practice, and therefore have significant influence over any programme's success¹³. No amount of initial pre-programme

¹² Perlman Robinson, J. and Winthrop, R. (2016) *Millions Learning: Scaling up Quality Education in Developing Countries.* Washington, DC: Brookings Institute.

¹³ Gilson L. (2015) 'Lipsky's Street Level Bureaucracy' in Page E., Lodge, M. and Balla, S. (eds) *Oxford Handbook of the Classics of Public Policy*. Oxford: Oxford University Press.

analysis could have revealed the reality of hidden powers and accountabilities – including dual reporting lines or the influence of older, more experienced teachers over the TDCs. For instance, confusion over reporting lines and from whom to take direction was a top concern for MTs early in the programme. This meant they struggled to know how to prioritise workload.

'We as MTs are in the system but not an official part of the system. There is a communication gap between the admin chain and the academic chain. There is also a difference in how the academic and admin chains perceive the role of MTs and TDCs.'

MT

'There's a lack of clarity in DDE offices about the role of MTs.'

MT

STiR's new commitment to understanding the beliefs and practice of headteachers – and therefore how it might influence or cultivate their intrinsic motivation – responds to this evolving understanding of where power really lies. This is an understanding that can only come through actual programme implementation.

Key questions for scalers:

- Do you understand the day-to-day challenges for key role-holders and the barriers they face?
- How are you refreshing your political economy analysis to encompass ongoing changes to the political landscape?
- How are you using these new understandings to 'course correct' your programme delivery and partnerships?

5. System alignment is a marathon, not a sprint

System alignment will always take time. The challenge for scalers is in understanding where their organisation or interventions fit: when to be influenced to align with the existing system, and when to hold their nerve on an existing programme model, despite a lack of alignment. Findings from our early research uncovered system-level barriers that the STiR programme was not designed to address – for example, a gap in teacher pedagogical content knowledge (PCK) that wouldn't be addressed through STiR's efforts to improve teachers' intrinsic motivation. This realisation prompted deep reflection, causing STiR senior leadership to question the core of its model: if this model is predicated on pedagogical knowledge which is often lacking, should the model expand to include the development of this knowledge?

'So when we are talking about any new idea or new way of doing things, the challenge is always to make it an integral part of the system without disturbing too many things. But [...] at the moment we are passing through that transition where we will have to now seriously question and challenge some of the existing practices and we have to become truly disruptive now. Unless you move certain things away there is not going to be space for some other ideas because both cannot co-exist.'

Delhi government adviser

Are wider system problems STiR's responsibility? What is its core role in the system? STiR came through the other side of this existential crisis holding its nerve: first through the reaffirmation that intrinsic motivation was at the core of what it does, but also in reworking its theory of intrinsic motivation, moving to a more behaviour-led model that allows it to better measure the impact of its intervention on teaching practice, rather than the hard-to-measure concept of mindset change.

Careful, evidence-informed adaptations to a programme that maximise the chances of system alignment should be seen as mission critical, rather than mission creep. Organisations should focus on understanding and codifying the core aims and mechanisms underlying their interventions so that they can effectively begin to align with the system they are in. Genuine alignment will always take time.

Key question for scalers:

- What are the 'non-negotiables' or the core of your offer?
- Do you have clear reflection points during your scaling journey, to help your leadership team be intentional about mission creep or pivot points?

C. Understanding Impact/performance

6. Quick data is not bad data

'Yeah, I mean see here the thing is two things work against us, one is people's experience so Senior people, they have been working in the system for three or four decades, and this also helps us in running the program ... it also goes against us because they might have been doing the same job for 30 years without growing in their own profession. But in these 30 years they have got strong bias about others and about themselves also. So one they think they are experts so their opinion they would consider that as facts ... so here the thing is about qualitative data, I mean they are blinded by their own experience ... So there is some work that needs to be done.'

Delhi government adviser

STiR's first data priority is formative rather than summative, using data to improve the programme, then understand its longer-term impact. Its focus is on collecting and using the data it can gather rapidly, drawing on the underlying lean evaluation principle of 'just enough data', i.e. collect just what you need to inform decision-making.

Given the speed of its scale-up, STiR did not have the opportunity to slowly devise sophisticated measures of success. So it began with more basic measures of progress (e.g. how many people attended an ART meeting) to give it some idea of how to make decisions and course-correct. Over time, these measures have become more sophisticated as STiR has learned about the programme through a combination of rapid-learning cycles and various, gradually improving versions of a large-scale survey, administered using Google Forms.

Another benefit to starting slowly with data is to ensure alignment with system and school-level data collection. In collecting simple measures of progress and involving district level officials, STIR has engendered a more collective will to generate useful data that can inform decisions.

District level staff are embedding the routines of data collection into their existing processes: they are developing the practice of interrogating data and problem solving the issues which are brought into view through this process. Over time, the system's data capacity can build on this progress using even more sophisticated outcome measures (rather than crude output-oriented ones), long after STiR has handed the programme over to the Delhi government.

Rapid, user-generated data collection, even if imperfect, can still drive important changes in behaviours and increase demand for ever-smarter data. While this kind of data might never convince current and future donors of a programme's efficacy, it can instead convince users across the system to understand, generate and use data.

Key questions for scalers:

- How are people going to use the programme data you generate? How can you make it
 interesting and relevant, so that they start to ask for improvements and more insights?
- How can you build a culture of data-driven decision-making, incorporating data into programme management meetings and wider education management meetings?

'But at least DIET faculties now ... I think they believe more in data so there is gradually starting to look at things more rationally, again this is I would say I mean data is not really informational decision, but this data is triggering a cultural change and how we could see things working on.'

Delhi government adviser

7. Volume should not overshadow quality

'I don't think quality comes in a day. If I went to see TDC one year ago and TDC now you can see world of difference ... So I think quality is also very much a journey. We are not going to be in a situation where we are going to have a perfect blueprint and we execute a perfect blueprint. Everyone will move from wherever it is they are standing, and I think if even that is what the question is are we finding the right people for job, I mean given any system these are the people there are, and we will have to make them grow and take them along the direction that we want them to grow.'

Delhi government adviser

Maintaining quality is a major risk when you scale-up, as relationships between programme staff and school-level actors become more remote. STiR's scaling journey in Delhi was rapid. It managed to get large numbers of people into post as TDCs, get its network meetings up and running and initial monitoring processes in place. As impressive as this is, our early findings revealed that the quality of TDCs across the system was highly variable. The key reason for this seems to have been that STiR and the Delhi government had not defined the roles in detail from the outset.

STiR and the Delhi government rightly focused first on reaching scale and allowed the role of TDC to evolve, giving headteachers significant autonomy over TDC selection. This has allowed them to see how the model works in practice. Now, one year in, quality can be prioritised, recognising that the diverse group of TDCs selected by headteachers requires highly

personalised, bespoke training and development. The benefit of doing this now is that many TDCs will already have grown in their roles. This gives the Delhi government an opportunity to understand and codify TDC competencies in a way which is more organic than if they were to have developed competencies at the beginning of the programme.

Key questions for scalers:

- How are you designing your monitoring processes and partnership discussions to open up deeper discussions about the quality of your programme, over and above the monitoring of Key Performance Indicators (KPIs)?
- How can you build in 'pause points' where you may decide to slow down the pace of scaling in order to refocus on quality?

8. Blurred responsibilities are not necessarily a problem

'Even the programmes that are not related just to TDCs they are now beginning to be called by the department, the message is that they are now a part of all that is going on. Even for when we launched the happiness curriculum, the headteacher and TDC and MT teachers were invited, so I think that TDC has got established as an institution in school and that has also led to their acceptance.'

Delhi government adviser

In our nine months of conversations with various system actors and leaders, we observed interesting changes in the discourse around accountabilities and responsibilities. With increasing frequency, STiR staff talked about how their work contributed to the wider 'everybody learning' ambitions of the Delhi government, including Mission Buniyaad and the Happiness Curriculum. Rather than protecting their time, staff actively encouraged MTs and TDCs to engage with these initiatives, 'doing the knitting' so that different interventions could maximise their collective impact on learning outcomes. Simultaneously, headteachers, DIET officers and other system-level actors began to own the STiR-specific outcomes – around improvements to teacher intrinsic motivation – even though these outcomes are not yet part of Delhi government's official goals.

On the surface, this blurring can cause two risks. First, might TDCs suffer from role creep, pulled in too many directions that push their STiR-specific work to the bottom of their 'to do' lists? Second, the holy grail of attributing specific outcomes to specific interventions is rendered even more difficult – although still possible with expensive and potentially disruptive evaluation methodologies. While these risks need careful mitigation, they are also success indicators of how a programme is embedding. As Sharath Jeevan points out, a key feature of a genuine system learning partnership is that 'System success matters most; any intervention helps define success and demonstrates a contribution to it'. While this does not mean that outcomes can completely deviate from the Theory of Change, 'embeddedness' does mean valuing the unintended or 'spillover' effects almost as much as the intended ones; in other words, if you develop the skills and capacities of system agents, these might become valuable for other aspects of school – or system – development. And that's OK.

'For us this is not a programme; TDCs are here to stay. Hopefully STiR is also here to stay for a while. We don't let go of our partners very easily, so whether they like it or not, is that what I suspect.'

Delhi government adviser

Programmes need to work with donors and governments to create system-level theories of change that are comfortable with a gradual blurring of role responsibilities, and their implications: increasingly expansive – even overlapping – roles of different actors; and a decreasing likelihood that an evaluation can ever untangle the impact of different interventions. While these align well with STiR's values – especially around 'ownership' and 'purpose', in Delhi STiR has been fortunate to work with enlightened donors and policymakers who are more than comfortable with these implications.

Key questions for scalers:

- Have you built a system-level theory of change that enables collective accountabilities for shared outcomes?
- How are you collectively celebrating achievements against these outcomes, so that all parties are recognised for their contributions?

CHAPTER 6 Taking a step back: reflections and recommendations

The learning partner role is a dynamic one. Data and insights are shared on an ongoing basis to allow STiR (or any scaling organisation) to react in real time. It allows them the opportunity to implement and test any intervention 'tweaks' immediately. We can already witness how our early findings have informed changes to STiR's programme. However, as our evaluation concludes, we offer five recommendations for STiR and its partners to consider, as levers that might contribute to the continuing journey of improvement and influence.

- 1. STiR should do more to harness the brightest of Delhi's change agents if it wants to accelerate change. For instance, STiR could use the brightest in the system to research and codify the skills and competencies of high performing TDCs. These high performers can also share their good practice across both district and state sharing forums, thus creating a much wider community of practice.
- 2. The Delhi government should work with STiR and other NGOs to ensure that existing efforts to improve headteacher quality also foster headteachers' intrinsic motivation as a key driver for improvement. For example, there may be opportunities to embed STiR's emerging new framework for behaviours into any changes to headteacher standards, or to explicitly build the development of these behaviours into existing leadership development programmes.
- 3. STiR should work with partners to design a research process that pursues the 'avenues of inquiry' that this research identified but did not have time to explore. For instance, an improved understanding of the critical role of DIET facilitators and the use of data for decision making throughout the system, could contribute to the programme's continued system-wide success.
- **4.** Delhi should connect with other cities that, in different contexts, are making similar efforts to transform their school systems through improving the quality and motivation of teachers. This means not only having Delhi teachers and system stakeholders learning from already high-performing systems, but encouraging other ambitious systems to learn from them.
- 5. DfID and other multi-programme education funders should convene communities of practice of those who are genuinely interested in 'system scaling' and wish to develop practices and approaches collaboratively. This would need to be underpinned by further work to clarify the differences between scaling and system scaling. It could be enhanced by the further development of a system scaling framework that supports communities of practice to use similar language and approaches, both of which are vital to successful collective problem-solving.

The purpose of this 'learning partner' formative evaluation was, effectively, for Education Development Trust to 'hold the mirror' up to STiR and allow it to reflect and learn about what was happening during an intensive and rapid scale-up in Delhi.

As an organisation, STiR has a genuine openness and commitment to ongoing learning, but also to sharing this learning with the wider community in the interests of creating change. Therefore,

the lessons outlined in Chapter 5 and the recommendations in Chapter 6 cannot only help STiR itself to sharpen and 'course correct' its own work in Delhi and beyond, but can also provide useful evidence for others to embark upon a similar journey.

Concluding remarks by Sharath Jeevan, CEO STIR

STiR's vision is of a world where teachers love teaching, and children love learning. We support education systems to reignite intrinsic motivation in teachers and officials through teacher networks.

When we first started working in Delhi in 2012 with an initial pilot involving 25 teachers, we did not foresee that just six years later we would be working with more than 200,000 teachers and six million children across four Indian states, and a quarter of all districts in Uganda.

This scale has come through embedding our approach to intrinsic motivation deeply into government education systems. Since our initial pilot in Delhi, learning has been at the core of how we approach our partnerships with education systems. We realise that we don't have all the answers upfront, and together with our government partners and critical friends such as Education Development Trust, we aim to develop genuine system learning partnerships to learn rapidly and iteratively.

Speaking honestly, we embarked on this scaling journey before we thought we were fully ready. What eventually convinced us to embark on the scaling journey with the Delhi government was our alignment around the importance of rigorous and rapid learning. By collaboratively reflecting upon key behavioural insights that we gathered as we started our scaling journey, we were able to learn rapidly and adapt our programme design and delivery iteratively to optimise our impact.

Delhi was the first place where we tried our approach at a whole-systems level – in Delhi's case, in every state government school across the state. We are proud of the results (for example, in classroom practice change and student learning) to which our approach contributed. We were also excited to see how our approach to intrinsic motivation complemented other technical interventions by the Delhi government, such as in foundational skills and community engagement, to lead to a greater overall impact. As a result, the 'Delhi model' has become the de-facto model for how we now engage with government education systems across all our geographies.

The evaluation partnership with Education Development Trust has played a major role in shaping our learning journey with the Delhi government.

First of all, the role of Education Development Trust as a critical friend to STiR and the Delhi government helped us in stepping back and thinking carefully about what a system-level theory of change could look like. As we started to scale our intervention, it became critical to apply a genuine system lens on our pathways to change, which we were then able to test through rapid learning cycle evaluations.

Secondly, the insights generated through these rapid learning cycles played a critical role in shaping our programme, both in terms of design and delivery, as we continued the scaling journey with the Delhi government.

By understanding specific 'bright-spot' system officials in the Delhi education system, we learned that strong facilitation skills, the ability to build relationships across the system and challenge colleagues, a passion for teaching and having a sense of purpose and shared responsibility, and a general openness to learning are core ingredients to develop among system officials through the training and coaching we provide. Based on these insights, we have positioned these skills and mindsets as pillars of the development journey that system officials experience during their engagement with STiR.

Based on the study findings, we are now exploring how we can best ignite intrinsic motivation among headteachers and engage them more deeply to ensure that teacher collaboration, observation and feedback is deeply embedded in the school structures.

Thirdly, having recognised the value of rapid learning cycle evaluations as we continue to embed our approach more deeply in the Delhi secondary education system, we are currently embarking on several internal studies using similar rapid, iterative research approaches. As an example, we are currently testing various hypotheses to learn how we can best support Mentor Teachers to set priorities through the use of data. The lessons learned about effective rapid learning cycle evaluations through the study with Education Development Trust has been key in strengthening our internal evaluation work.

We would like to sincerely thank DFID for its generous support to make this study possible, as well as its rich input in terms of the study design to generate rigorous insights into our system scaling process.

We hope that the findings of this study will be helpful for others who are going through their own scaling journeys. We would also like to express our gratitude to Education Development Trust for being a genuine critical friend and helping us learn as we embarked on this scaling journey. Its intellectual leadership in shaping the design and implementation of the study resulted in rich insights that have been fundamental to STiR's journey, and we look forward to continuing to ensure that we incorporate findings from the study in our strategy going forward.

Lastly, we would like to thank the Delhi education system for its openness to learning as well as its leadership in responding to the insights generated. The willingness to engage in a genuine system learning partnership has been fundamental to realise the successes we've collaboratively achieved thus far, and will continue to remain key as we work towards optimising our impact going forward.

Annex A. Stories of change: STiR's influence on system roles in Delhi

	Emerging outcomes RAG: end of LC1	Our overall findings form LC1 (Dec 2017)	Reported changes to the role in 2018 as of end of LC2 (Sept 2018)
Teacher Development Coordinator	 Understand the goals of the partnership. Understand that their role is important and how they contribute to improving teacher intrinsic motivation. Allocate time in favour of progression-focused activities. Ensure teachers remain focused on Learning Improvement Cycle goals. Improve their teacher facilitation skills and feedback. Develop core mindsets and behaviours. 	We observed some very engaged 'bright spot' TDCs, with clear competencies emerging which describe the skills, mindsets and behaviour of the best TDCs. However, the quality of TDCs was variable – we saw lots of variation in TDC engagement across our sample in LC1. Possible causes included less than adequate communication about the TDC role and, related to this, HoS selection of suitable candidates.	TDCs were given more content-focused training in order to bridge the gap between teacher's motivation and actual improvement in practice. They were also supported to develop skills in coaching in order to support teachers in a more structured way. Communications about the role were improved by the government. The purpose was to generate understanding among HoS, which would in turn influence either their selection of a new TDC or support to existing TDCs. TDCs were mandated as the 'point person' for two other high-profile initiatives in Delhi. The purpose was to position TDCs as an integral part of school life.
Mentor Teacher	 Understand the goals of the partnership. Understand that their role is important and how they contribute to improving teacher intrinsic motivation. Allocate time in favour of progression-focused activities Ensure teachers focus on Learning Improvement Cycle goals. Provide excellent coaching and model excellent facilitation skills to TDCs. Develop system leadership skills. Develop core mindsets and behaviours. 	We also saw some anecdotal evidence that suggested where MTs had more autonomy in their role, they were more engaged and more able to support TDC effectiveness, e.g. by prioritising their time and effort towards struggling TDCs. The flip side of this was that system barriers were preventing many MTs from having this autonomy. They had multiple accounting lines and were often required to rapidly respond to ad hoc requests.	STIR sought to address issues of accountability by working with government structures to create clearer reporting lines. A new round of recruitment of MTs solidified their place in the system. Plans were then put in place to extend the expertise of MTs and to develop an MT certification programme.
DIET Facilitator Head of School	 Buy into partnership purpose and goals. Select TDCs and support them to perform their roles well. Work well in collaboration with TDCs and MT. Ensure school environment supports MTs to work with TDCs. Understand the goals of the partnership and how their roles contribute to achieving the outcomes and impact of this. Have more time in school, awareness of issues and priorities of schools and networks. Identify training gaps in schools. Communicate needs of schools and networks to DIET level. Develop system leadership skills. Develop core mindsets and behaviours. 	We identified Headteachers as 'lynchpins' for the success of the programme. However, our evidence found that, of the HoS we interviewed, most were not engaging well in the programme. This was often due to being overburdened with other work, lack of understanding of the value of the programme, or the perception that it would be a fleeting policy directive, soon to be replaced by something new. The DIET's role was still becoming clear during LC1. However, among those that we interviewed, there was clarity on the goals and vision of the partnership. We also observed that many DIET facilitators were included in the LIC design process.	In 2018, STiR and the Delhi government worked to improve communication to HoS about the role – to help them better understand the value and aims of the programme. In 2018 STiR engaged in capacity-building activities at the request of the DIET with the intention of them becoming the key system entry point. Specifically, this has included training in data collection and its use in decision-making.

OUTCOME BLOCKED OUTCOME VARIABLE OUTCOME EMERGING FURTHER RESEARCH NEEDED

Annex B. Initial system-level theory of change

Impact

ENABLING ENVIRONMENT FOR TEACHERS Delhi's school system is more oriented towards the prioritisation and development of teachers as a key driver in its 'everybody learning' strategy

Long-term outcomes

System outcomes/ Wider use and applicability of skills and mindsets

STIR* leaders have improved levels of intrinsic motivation

MTs and TDCs possess the core mindsets and behaviours and regularly work to develop them in teachers

Both STIR* and System** leaders have greater will and skill to use data and evidence to inform decision-making

Routines and systems align System** leaders to focus on improving Teacher Intrinsic Motivation

STIR* and System** leaders have a shared understanding of the systemic and policy barriers that disincentivise or prevent the prioritisation of teacher intrinsic motivation and are committed to addressing and overcoming these

Strengthened STIR leader and System leader outcomes lead to improved motivation and attitudes, knowledge and skills foster the engagement and enablement required for an overall enabling environment in Delhi's school system

Immediate outcomes

Individual outcomes/ Demonstration of skills and mindsets

Teacher Development Coordinators

- Understand the goals of the partnership
- Understand that their role is important and how they contribute to improving teacher intrinsic motivation Allocate time in favour of
- progression-focused activities
- Ensure teachers remain focused on Learning Improvement Cycle goals
- Improve their teacher facilitation skills and feedback
- Develop core mindsets and behaviours

Mentor Teachers

- Understand the goals of the partnership
- Understand that their role is important and how they contribute to improving teacher intrinsic motivation
- Allocate time infavour of progression-focussed activities
- Ensure teachers focused on Learning Improvement Cycle goals
- Provide excellent coaching and model excellent facilitation skills
- Develop system leadership skills
- Develop core mindsets and behaviours

DIET Facilitators

- Understand the goals of the partnership and how their roles contribute to achieving the outcomes and impact of this
- Have more time in school and awareness of issues and priorities of schools and
- Identify training gaps in schools
- Communicate needs of schools and networks to DIET level
- Develop system leadership skills
- Develop core mindsets and behaviours

Head of School

- Buy into partnership purpose and goals
- Select TDCs and support them to perform their roles well
- Works well in collaboration with TDCs and MTs
- Ensures school environment supports MTs to work with TDCs in their school

System Leaders

- System leaders buy into partnership purpose and goals
- System leaders actively work to facilitate success of networks and remove barriers to this success
- Stakeholder meetings communicate project goals clearly, identify barriers to success, and produce concrete actions at each level
- Buy-in to a learning focused approach at all levels
- Improved collaboration between MTs, and TDCs respectively

Activities

STIR PMs/DIET co-facilitate MT Institutes

Ongoing reflective support calls for MTs

MTs observe network meetings

STIR PMs/DIET and MTs deliver TDC Training institutes

TDC meetups

MTs and TDCs share data and learning with others

MTs regularly communicate with HoS and DIETon progress

MTs and TDCs receive continued professional development and mentoring

Stakeholder and partnership meetings: HoS, District, and SCERT-STIR

necessary skills to deliver training and support at MT and TDC level SCERT work together to co-

design training

STIR PM holds

STIR PM/ DIET supports MT observations of TDCs in network meetings

STIRPM facilitates discussions with all stakeholders

STIR PM identifies capacity development needs at zone and district level

data collection and analysis

Inputs

STIR PM codesigns training in partnership with SCERT and DIET

STIR PM/ DIET provides MT and TDC training

Ongoing

NOTE

*STIR Leaders include Mentor Teachers, Teacher Development Coordinators, and DIET Facilitators

^{**}System leaders include HoS, DDE and SCERT