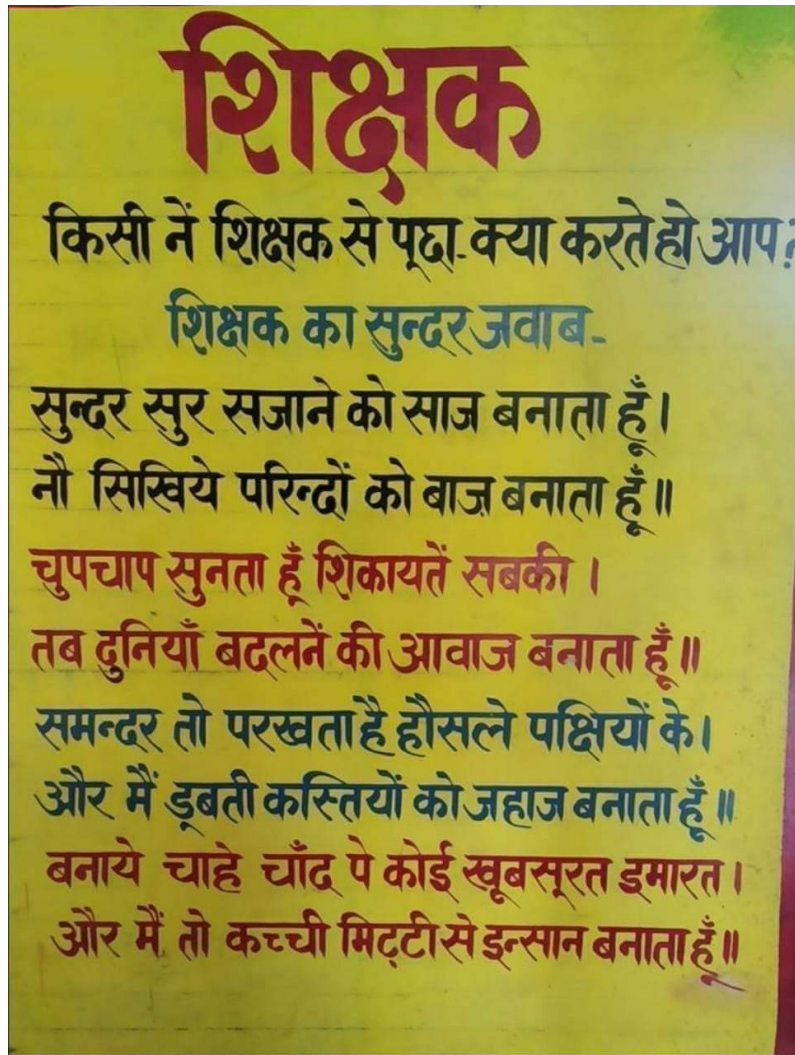


# What works and why in Indian government schools -

## Teachers' voices in Delhi NCR

### Policy brief

Marie Lall, Kusha Anand, Megha Bali, Aditi Banerji, Samta Jain, Feroz Khan,  
and Anviti Singh



## Introduction

The Right To Education Act (RTE) 2009 has ensured a quantitative expansion of India's education system so that all eligible school-going students are brought within the formal education system at the elementary level/ primary education (Class I-VIII) (Government of India, 2013). However, the key problems in government schools are high dropout and low retention rates. It is not just years of education that matter, the issue of quality of education provided at the school level is equally important (Jain and Prasad, 2018). Most research on Indian government schools has concluded that government education provision is of poor quality (Bhattacharjee, 2019; Kundu 2019; Khatua, & Chaudhury, 2019). This is underpinned by an exodus of the middle and lower-middle classes to private provision (Lall, 2013). Anecdotal evidence shows that even government schoolteachers often choose a private alternative for their children.

A key criterion for the RTE to succeed is the role and the quality of teachers. According to the RTE, teachers should behave as reflective, empowered, professional practitioners, working within a constructivist orientation (Wolfenden, 2015). Research across the globe consistently demonstrates that teachers are important factors in determining the learning and achievement level of students. Improving the quality of teaching and its process may be one of the effective means of raising pupil achievement levels. However, there are hardly any studies reflecting on the Indian context that have identified the indicators that could affect student learning outcomes, teachers' efficiencies, quality of teaching practices, or have tried to understand teacher perspectives on quality education.

The IRDSE report examines teachers' perspectives on what works in their classrooms as well as the various issues that limit their competencies and teaching abilities, thus restricting them in adopting efficient teaching practices and methods. The full report (available on the IRDSE website) includes a summary review of Indian education policies and the relevant literature; a section outlining the purpose of the research in light of the existing knowledge gaps; the methodology used and how this was adapted given the COVID 19 restrictions; the background of the field research site and the teachers' voices on what works and why in their government schools. The report concludes with the barriers teachers face and policy recommendations based on what the participating teachers imparted. This policy brief summarises the objectives, the methodology, the background on Delhi as a field site, and what the teachers imparted on what works in their classrooms. The brief ends with a summary of the barriers and challenges teachers face and the full set of policy recommendations.

## Objectives

The research proposed to explore 'What works, in which contexts and under what conditions, to most effectively support all students to learn at upper primary and secondary levels in Indian government schools?' This was based on a rigorous literature and policy review that showed following gaps:

*At the classroom level:* To date there is not enough research on unmeasured variables such as the quality of teachers, curricula and pedagogy. The review also highlighted the constant criticism of teachers' performance in government schools. The conclusion drawn seems to be, that, despite paying teachers high salaries,

students are not performing well in examinations since a majority of teachers are not competent enough to teach effectively (National Planning Commission, 2012). Teaching is a demanding and constantly evolving profession. Hence, developing the capacities of teachers at regular intervals is imperative for quality education in government schools. Thus, it is also important to see how the system is developing the capacities of schoolteachers. It is also important to explore teachers' perspectives on various issues that are limiting their competencies and teaching abilities, thus restricting them from adopting efficient teaching practices and methods.

*Methodologically:* The surveys designed in previous studies were mostly based on a relatively small sample of schools in just one State or area, thus not offering generalisable conclusions.<sup>1</sup> Many studies are based on quantitative data collected from schools as opposed to classroom-based observations or interviews with teachers. Repeated visits to schools would be necessary to view the reliability of intra-school observations on teachers' absence as well as to account for seasonal variation, often not part of the research design. In depth interviews with teachers is also required to pave the path for a deeper and more engaged understanding of the above concerns and challenges surrounding teachers' work, which in turn can guide the nature of policies and provides a transparent picture of what works, around this issue.

*Teacher training at the central government and state level:* There are initiatives such as the Learning Enhancement Programme (LEP) under the Sarva Shiksha Abhiyan (SSA) for elementary teachers and the 'orientation of secondary school teachers' that are designed to offer professional development opportunities for classroom teachers (Government of India, 2014). But despite these initiatives and the official discourse of 'child-centred' learning, a series of government reviews such as the Justice Verma Review 2012 and Joint Review Missions for Teacher Education catalogue serious deficiencies and challenges within the system (Banks and Dheram, 2013; MHRD, 2012a). It is unclear what teachers feel about their training and the changes that have been made.

*Hierarchies in government schools:* Public education is provided by different government agencies. To understand the public education landscape, it is essential to understand the governance structure and the operational mandate of these government agencies (Bhowmick and Yadav, 2019) and how they differ. For instance, the three education systems in Delhi - MCD, DoE and Central schools - run independently of each other. They vary in parameters like the number of teachers, Pupil to Teacher Ratio (PTR), per capita expenditure on a student, school fees, and students' learning outcomes. Current studies do not take this into account.

### *Changes due to COVID 19*

The original research proposal, therefore aimed to engage with three or four government schools in top performing districts across three high performing states (Rajasthan, Karnataka and Assam<sup>2</sup>) as well as the capital - Delhi. The advent of the COVID 19 pandemic in March 2020 at the start of the fieldwork meant that the project had to be adapted. After receiving the amendment to the ethical approval,<sup>3</sup> the team was able to engage online only with Delhi teachers. However instead of

---

<sup>1</sup> The original project proposal was going to collect data in 3 States as well as Delhi.

<sup>2</sup> These 3 states were identified by using NAS.

<sup>3</sup> Provided by KREA University

conducting research in three top performing schools per state, 110 in depth interviews with teachers from 15 schools were conducted.

## Methodology

The methodological approach of this study was to identify positive outlier government schools in terms of achievement and learning outcome indicators (in classes V & VIII) and dropouts/ retention in class IX. 'Outlier schools' were defined by the team as those fulfilling the below criteria:

- The schools where at least half of the students appearing for exams pass with more than 60 per cent marks,
- The schools with Pupil Teacher Ratios (PTR) in the range of 23 to 35,
- No repeaters in class IX if the school extends to secondary or senior secondary level, and
- Schools where at least 10 students appear for exams in class V & VIII ( $APPRT5 \geq 10 \leq APPRT8$ ).

Although these criteria do not appear to be very stringent, the overall data shows that very few schools meet all these criteria.<sup>4</sup>

This study investigated the performance of government schools in Delhi, the National Capital Territory, despite it not emerging as the top performing Union Territory (UT) based on the NAS data because it is the political and administrative capital of India and enjoys the special status of partial statehood or Union Territory with a legislature (Aggarwal, 2019) and the education reforms conducted since 2015 by the Aam Aadmi Party (AAP) government.

Data was collected between July and August 2020. Each school was asked to provide the contact details of a minimum of 8 teachers. In total 110 teachers agreed to be interviewed. Out of 110 interviews conducted, 85 interviews were conducted in Hindi and 25 in English. It was noted that approximately 55 per cent i.e. 61 teachers (8 primary and 53 TGT) have been teaching for over 10 years and approximately 18 per cent i.e. 20 teachers (5 primary and 15 TGT) have less than 10 years of experience in teaching. The rest of the teachers did not mention their years of experience.

Due to the social-distancing procedures during the Covid-19 crisis, online methods of data collection were used for this research. This included the use of Zoom to virtually replicate the face-to-face interviews with the 110 government schoolteachers. Interviews in English were transcribed with the help of the AI Otter application. Overall, participants reported that online interviewing was a positive experience. They identified strengths of this approach such as: 1. Convenience and ease of use, 2. Enhanced personal interface to discuss personal topics (e.g., classroom methods and challenges), 3. Accessibility (i.e., phone, tablet, and computer), and 4. Time-saving with no travel requirements to participate in the research. Many teachers also wrote to the team afterwards expressing that the interview was a self-reflective process for them where they felt the freedom to express their views.<sup>5</sup>

---

<sup>4</sup> Delhi schools did not meet these criteria and the no fail component for grade IX had to be relaxed. See full report for details.

<sup>5</sup> Ethical approval for this project had been obtained from KREA University and the team adhered to the IRDSE Ethics Manifesto at all times. The IRDSE Ethics manifesto is available on the IRDSE website.

Online interviews were first transcribed and cleaned before they were imported to NVivo.<sup>6</sup> NVivo improved the data interpretation and analysis process by systematically managing the large amount of data (700 pages +), and making it more manageable for collaborative writing (Spencer, 2007; Bazeley, 2007; Maher et al., 2018).<sup>7</sup>

## The research field - Delhi background

Delhi has a total of 5,726 schools all across the National Capital Territory (NCT) (Edudel, 2020) out of which, the Delhi government has a total of 1,227 government and government aided schools, which is 21.30 per cent of the total schools operational in the National Capital Territory (NCT).

According to a study by Juneja (2010), there has been a diversification in the types of schools run by the Delhi government in the past decade, which promoted hierarchies in access to government schools. For instance, besides the MCD and NDMC schools, which add to the hierarchical structure of Delhi government schools, there are 'model' schools. These 'model' schools are some of the primary and secondary schools that are better staffed with better provision and are expected to serve as a 'models' for other schools (Juneja, 2010). Admission to Sarvodaya schools is prized over admission to ordinary municipal schools, and admission to the Pratibha Vikas Vidyalaya is prized over admission to a regular senior secondary school (Juneja, 2010).

The State Report card of Delhi by the National Institute of Educational Planning and Administration (NIEPA, 2016) reported that in 2015-16, out of 138,849 teachers in schools, nearly 76,010 teachers (54.74 per cent) are employed in government schools.<sup>8</sup> There is a teaching staff crisis due to a centralized, long, and complicated process that delays the recruitment of teachers. Although Delhi is short of roughly 25,000 teachers, the Delhi government considers only 7,646 posts vacant, as nearly 15,402 guest teachers and 2,792 contract teachers were employed (Kalra, 2017).

The Aam Aadmi Party (AAP) was established on October 2, 2012, by Arvind Kejriwal against the backdrop of a movement that started in 2011, to fight against corruption in India. After the landslide victory of AAP in 2015, AAP seems to have visibly transformed the ailing school education system of Delhi (Sahoo, 2020). The government allotted the new funds to education<sup>9</sup>, introduced new teacher training

---

<sup>6</sup> NVivo is a set of software tools that assist a researcher in undertaking an analysis of qualitative data. It manages and organises the qualitative data, provides a system to answer the research question and develops image of the whole study for better understanding.

<sup>7</sup> The report would have been benefitted from observing teachers' classroom practices in schools to triangulate what they shared with the team. It would also have helped, if as originally proposed the team had been able to adopt a fieldwork based approach to meet the different stakeholders (such as parents, head teachers and education district officers) and then integrate the various perspectives in the research narrative. As such the report reflects the voices and narratives of 110 Delhi teachers and reports their views on classroom practices, training, inclusion and the challenges they face.

<sup>8</sup> It was noted in the Praja Report (2019) that the Pupil-Teacher ratio (PTR) at 29 for Delhi government schools in 2017-18 has been below the prescribed norm of 30 for primary and 35 for secondary levels. However these numbers do not bear out in reality.

<sup>9</sup> In the financial year 2018-19, the education sector continued to be the priority sector with 'a maximum share of allocation of 27.36 per cent of the budget allocated for schemes and projects' by the Delhi government-run by the Aam Aadmi Party (AAP) (Economic Survey of Delhi, 2018, P. 6) During 2017-18, Delhi was at the top, with 23.4 per cent of its budget estimates earmarked for the education sector,

courses, student learning programmes and have infused money to improve ailing schooling infrastructure (Sahoo, 2020; Praja Foundation report 2019). Some of the remarkable efforts made by AAP towards improving government schools include making education free up to grade XII, increasing scholarship for students scoring 80 per cent, above INR 2,500, and removing the 'family income' rider on it (Bedi, 2019). An article reported that AAP claimed that the 'government will be working on a plan to achieve 100% literacy in the national capital' (Hindustan Times, 2017).

Recent online survey results<sup>10</sup> revealed that due to improvement in the standard of education of Delhi government schools, 61 per cent of the respondents from 70 constituencies of Delhi prefer sending their children to government schools over private ones. Further, 76 per cent of respondents are satisfied with the quality of education offered at Delhi government schools, while 84 per cent also expressed their satisfaction with government school infrastructure (Hindustan Times, 2020). The improvement have been observed over the last five years since AAP came into power; a staggering 82 per cent respondents in an article said that the quality of education and related facilities have enhanced (Hindustan Times, 2020).<sup>11</sup>

## Main findings

### Practices<sup>12</sup>

Government schools offer education to students from different backgrounds. Many families who access government provision are first generation learners, families where children have to work or help their parents, children from migrant families and others who come from the economically weaker sections of society, where parents might not have the ability to support them with their learning and homework. As such teachers in government schools have to use particular practices to keep students engaged. This is challenging in that most government schools will have high PTRs, and teachers have to find ways to support large numbers of children with very different ability levels.

---

followed by Chhattisgarh (19 per cent), Maharashtra (18.6 per cent) and Assam (18.3 per cent) in comparison to the National Average of 14.8 per cent (Economic Survey of Delhi, 2018, P. 17)

<sup>10</sup> The survey was conducted by the Neta App Janata Barometer Survey, before the February 8, 2020 Assembly elections. The survey was based on the responses of over 40,000 citizens across all 70 Delhi constituencies between January 20-27, 2020 to gauge the public verdict on the performance of the AAP government in the key performance areas of education and health. Retrieved from <https://www.hindustantimes.com/education/61-prefer-sending-kids-to-delhi-government-school-says-survey/story-2baF9njo0uxunPLGfrK4yL.html>

<sup>11</sup> However there are also critical voices - According to the India Today Data Intelligence Unit (DIU), that scanned the reports relating to the 70 promises made by the Aam Aadmi Party (AAP) manifesto in 2015, AAP fulfilled 3 out of the total of 7 of the education sector related promises made in the manifesto. This means there are still some challenges that need to be met. *AAP's 5-year report card: Did Kejriwal's govt fulfill its promises?* Retrieved from <https://www.indiatoday.in/diu/story/aap-s-5-year-report-card-did-kejriwal-s-govt-fulfill-its-promises-1644302-2020-02-07> Accessed on April 24, 2020

For the purpose of this study, the government school teachers interviewed are categorised as "Rajkiya Pratibha Vikas Vidyalayas" (RPVV) and "the rest of Directorate of Education Schools" (DoE schools) RPVV schools are the Delhi government schools which offer admission to students on the basis of an entrance test. The admission is offered to only those students "who have studied continuously for at least two years in Delhi Government-Govt. Aided/ MCD/ NDMC/ Delhi Cantonment Board Schools situated in Delhi with at least 60% marks in the Class last passed preceding to the admission are eligible for registration for Entrance Test" (DoE, Delhi Government, n.d.). Although, the practises of RPVV and the rest of the DoE schools are similar, however, this binary is situationally used in the text and the category of the school is specified as per the narratives.

*Behavioural engagement:* Teachers explained how a key element of keeping students engaged in the classroom was based on a good teacher-student relationship, which was based on building a personal connection with their students. This helped in developing fearlessness. It included knowing about the children's family backgrounds and then adapting lessons to scenarios familiar to the students. The teachers felt that the happiness curriculum, designed by the Delhi government supported their approach in building personal connections with their pupils, as well as building co-scholastic skills of mindfulness, instilling moral values and reflection.

*Academic engagement:* Teachers explained how academic engagement is directly linked to refreshing the students mind to be able to engage them better in the classroom teaching and activities. Many primary teachers experienced that engaging students in the classrooms is the difficult part, and they had to prepare and conduct lots of activities including dances, singing, competitions and quizzes. Nearly all the teachers have said that they use tablets given to them by the department. They use these to show movies to motivate students.

*Teacher's autonomy in classrooms:* For social and emotional as well as the interpersonal relationships between teachers and students, a teacher requires substantive freedom from the head teachers to be able to try out new things in the classrooms. Most teachers felt that their head teacher was supportive and allowed them to run classes the way they felt worked best. However, teachers did complain, that there were 'orders' from above - meaning the Department of Education, which did not always allow them to work in the ways that worked best for their students. (More on this in the section on barriers and challenges)

*Optimal pupil-teacher ratio:* It is interesting to note that the RPVV teachers laid significant emphasis on the optimal pupil-teacher ratio, which facilitates teachers in providing students with the required individual attention. The pupil-teacher ratio of 35:1 is a real advantage in the RPVV classrooms. Active teacher-student engagement in the RPVV schools is also intimately related to active parent-teacher collaboration. When there are fewer students, it is also easier to engage the parents.

#### *Classroom teaching methods and pedagogical practices*

There is an important interplay of classroom context (which includes the teacher-student relationship, its three dimensions - engagement, autonomy and agency) and the classroom environment.

*Assessment and grouping of students:* Grouping of students, both in a homogeneous and heterogeneous manner, is a common practise across all government schools. There is a succinct difference of segregation of students followed in the RPVV according to their academic performance is called "Pratibha, Nishtha and Neo-Nishtha", and this practise is prevalent only in the rest of the DoE schools. More on this in the section on ability grouping below. All teachers in all the schools in this study use the strategy of peer learning and collaborative learning among the students irrespective of their class size. Teachers felt that weaker students learnt better when stronger students explained things to them. Teachers had different ways of making groups and checking on them, but for all it was a key strategy to engage all learners.

*Recapitulation and testing previous knowledge:* Many of the teachers stated that they revise what they taught in the previous class and also check previous knowledge of

any topic. This helps teachers in knowing the conceptual understanding of the students as well planning their lessons.

*Special attention on the non-responders:* For the backbenchers, teachers make a special effort and call them by their names. The teachers have reported that they randomly ask questions from the students and all the students become attentive and so engaged in the lesson. The teachers also use the strategy of mind mapping, which induces maximum participation of the students.

### **Subject specific practices**

Aside from chalk and talk, and lectures used by most teachers selectively, there are a number of subject specific practices. Mathematics and sciences use *computer-aided instructions* and *K-YAN* (through which you can show videos or you can make your own videos, which can then be shown on the smart boards); teaching through *games* (for instance, through Ludo to teach probability); as well as *activity-based learning*.

Some teachers explained how they used *experiential learning* (e.g. making a bar diagram and histogram taking everyone's age and weight), *group discussions* and *student presentations* as well as *theatre and role plays* (e.g. theatre can be used to explain the functioning of the heart; there are four walls, what are arteries, where the blood is going, using the children as models in the class to explain the working and functioning of the heart). Science teachers also use a lot of *demonstrations*.

Social science teachers as well as science teachers will use *games* (such as the dice game - on every face there is a question - How? When? Why? A teacher throws the dice to any student who has to answer) and other teaching aids such as *flashcards*, also often used in language teaching. Social science teachers will go on *excursions*, use *debates and role-play* as well as *activity based teaching* (such as staging elections to explain the democratic system). They also use *student presentations*, many asking groups of students to work together. Many teachers spoke about the *inductive method and mind mapping*, asking students to relate things to movies they had seen or their home environment.

All teachers agreed that they had to use different strategies for high and low achievers inside the class. Sadly when the exams approached, a more exam oriented teacher centric teaching technique had to be applied, especially for weaker students so that they could attain a 'minimum grade'.

### **Ability grouping**

#### *Class setting - grouping of students:*

The practise of grouping students (grades VI to VIII) into homogeneous groups of Pratibha; Nishtha, and Neo-Nishtha, in different sections has been acknowledged as regular practice by most of the teachers of the rest of the Directorate of Education (DoE) schools.<sup>13</sup> According to the teachers Neo-Nishtha cannot read, Nishtha can read the sentences but not necessarily the bigger part of the written material and Pratibha are the good students. The categories of the three groups are fluid as teachers test and retest students.

---

<sup>13</sup> For more on this see Chunauti 2018



### *Teachers' Views - the problems of ability grouping*

The grouping of students seems problematic, as many of the teachers described the psychological issue of segregating the students into the three groups. The children do not get the opportunity to learn from each other. The ability grouping also creates a social reality for students who see themselves as intelligent vis-a-vis unintelligent; superior vis-a-vis inferior.

### *Mission Buniyaad*

'Mission Buniyaad' is generally organised during the summer vacations in which teachers offer extra classes for the 'weaker' students. Focus is on the basics. The programme appears to successfully help weaker students to gain the skill of reading and writing. It also allows teachers to focus entirely on the weaker students for a set amount of time. However, the programme does not reach all, as children from migrant families will not stay close to the school during the holidays.

## **The role of training**

Training, a pre-requisite to become a teacher, and an essential component for continuous professional development, has emerged as a critical contributor towards improving the performance of teachers as well as students in Delhi government schools. Teachers have diverse opinions regarding pre-service and in-service training, with more importance given to in-service training as it is related to subject- and policy-specific issues and is often needs-based. In fact, more than half of the teachers were positive about in-service training. Without undermining the importance of pre-service training, which teaches introductory psychology, methods to plan lessons, and provides scope to experience and practice teaching at school, barring those teachers who have pursued B.Ed. and B.El.Ed from the University of Delhi, almost all the teachers were critical of its short duration and its overly theoretical approach.

### *Practice teaching: The ultimate winner during pre-service training*

Since experience is the crucial dimension for teachers' performance, the practice teaching or school experience programme - both a part of the D.El.Ed or B.Ed - is particularly important. Teachers are reminiscent of their practice teaching days and have described it as helpful in learning the ropes of teaching. It appeared that the experience of visiting schools, getting to meet real teachers and learning from them simple ways of maintaining records, register, diary etc. was most helpful to budding teachers.

### *Online training - the Chalklit app and its effectiveness*

Teachers of Delhi government schools have been "ordered" to join on-line training provided through the Chalklit app. So most of the teachers interviewed are using this app for training and many have provided positive feedback about it - in particular how it is helping them in improving their teaching techniques, in understanding students and their backgrounds, and gaining knowledge of various government policies.

Teachers unanimously expressed that pre-service training needs to be more practical rather than theoretical. Also, in-service training needs to be organised in small groups so that teachers can communicate and discuss in a more nuanced way and share practices and solutions to problems with each other.

## **Inclusion**

The National Education Framework 2005 emphasises implementing the 'policy of inclusion' in all schools and throughout the education system. The policy ensures that "all children, especially the differently-abled children from marginalised sections, and children in difficult circumstances, get the maximum benefit of this critical area of education" (NCERT, 2007, pg. 85). The policy aims to engage all the students in the process of learning. It was therefore important to hear what teachers had to say about inclusion and how they applied it in their daily practice.

### *Children with special needs*

Most teachers felt that they had been sensitised by training to include such children in their classes, but that they had not been taught how to support them academically, especially in a mixed class setting with able children. As a result many teachers felt that these children were the responsibility of the special educators.

### *Hard to reach children: home, migration, and schooling*

The policy of inclusion is not only related to children with special needs – although most teachers understand it in this limited way. It also includes the children that have the right to education but are 'hard to reach.' Interaction with the teachers reveals that government schools are providing opportunities for education to all the children, including those who are 'hard to reach'. However, different home situations (such as having to work to support the family) create obstacles for many of these children. Children from migrant families suffer particularly as the families tend to return to the villages for the harvest period and children miss important parts of the syllabus. In all cases where families are from the economically weaker sections of society, children find education more challenging and require special attention from the teachers.

### *Pedagogical practices for inclusion*

The philosophy of inclusion also focuses on including the children within the classroom, particularly those categorised as 'weak students' or 'slow learners.' During the fieldwork, it was found that there are few students in every class to whom teachers consider 'weak' or 'slow'. Teachers use different methods to teach those they consider weak, sometime giving extra time during games and drawing periods, or in some cases after school.

## **Challenges and Barriers**

The teachers play a crucial role in translating policies into the classroom and work with students to achieve good results. Hence, it is imperative to understand the barriers they face. The main barriers that teachers encounter are listed in the following paragraphs (based on teachers' recurrent responses).

Lack of time and resources are the main complaints by teachers who took part in the research. Lack of time is made worse by the non-academic duties teachers have to fulfil. Although there have been lots of infrastructural improvements across Delhi government schools there are still resource constraints such as limited funding to buy teaching aids, equip classrooms with smart boards, and schools with lab facilities. These deficiencies act as a barrier to teaching and policy implementation.

The biggest lack of resources is teachers themselves. A 2018 report by the Ministry of Human Resources Development reported 56,622 sanctioned posts or vacancies for

teachers (50,081 state-based and 6,541 under Sarva Shiksha Abhiyan), 75.04 per cent were filled in Delhi. In addition, although 17,000 teaching posts are available, only 5,000 contract teachers were hired, and government school posts are thus vacant, and the recommended PTR is not achieved (Mohanty, 2019). Teachers have also pointed out that due to the high influx of students and the low recruitment of teachers by the Delhi Government, there is more pressure, which influence their teaching quality. Fewer teachers also result in larger Pupil-Teacher Ratios. This is a big challenge for teachers as they feel that are unable to give individual attention to children.

Another challenge is students' basic numeracy and literacy skills when they arrive in a higher class. Teachers say that even in classes where English should be used they often have to teach bilingually as children do not come from home environments where they use English. The No Detention Policy means that students arrive in grade IX without much knowledge of the basics. At that time the PTR of Hindi medium sections also increases, as many students have weak English skills. All this results in difficulties in applying more child centric teaching and learning methods, and closer to exams teachers sometimes go back to cramming and rote learning, just to finish the syllabus so that students can pass the exam. This is particularly the case in Nishtha and Neo Nishtha classes, where the pace of learning is slower.

Lastly teachers shared their dissatisfaction governments make policies they are supposed to implement without consulting or taking feedback from them. This is in line with studies that have also emphasised how the absence of teachers' voices and agency in policymaking and implementation processes, inadequate appreciation from immediate stakeholders such as higher authorities and parents, and the absence of meaningful peer-engagement forums for self-development have led to demotivation among government school teachers (Anand, 2019; Smail, 2014; Brinkmann, 2019; Batra, 2005; Ramachandran, 2005; Mooij, 2008).

## Recommendations

The aim of this study, titled "*What works and why in Delhi government schools,*" was to bring to light how teachers make sense of their classrooms and the practices they implement in their classrooms for engaging students. The following findings, recommendations and implications for policy can be drawn from the data of this study.

### Practices

Teachers shared a large number of practices. It needs to be remembered that all teachers came from ordinary government schools. Though they had benefited from the reforms by the Delhi government, they still had to contend with large PTRs with children from economically weaker sections (EWS) families, non-teaching duties, and other constraints, as described above. It is therefore remarkable that these teachers are managing to get their students to achieve well in comparison to many other ordinary schools. It is, consequently essential to learn from the practices they have developed.

**Personal connection:** Building a personal connection with the students is essential for an active teacher-student relationship and student engagement in classrooms. Socio-emotional bonds between teachers and their students need to be strengthened in the classrooms for better engagement.

*Happiness Curriculum* fosters a fearless environment, mindfulness, and learning without burden in the classes from nursery to grade VIII. It should be for all classes.

*Peer learning, experiential learning, and activity-based learning:* According to the teachers, these work best for engaging a diverse group of students in both Sarvodaya and Pratibha schools. Any of these work particularly well when stronger students help weaker students. The subject-specific examples used by teachers on a daily basis are elaborated in the study.

*Mission Buniyaad:* A summer school programme, facilitates improved learning levels and skills in reading, writing, and arithmetic for weaker students. It allows these students to catch up with the rest of the class. This, however, only works when students remain near their schools during the holidays. Some teachers suggested that this kind of extra time needs to be planned into the regular school time in order to reach all.

*Pragati books* are DoE publications for new readers in which subject books are simplified in language and the content, and are supported by visuals and diagrams, and should be made available for students at all grades. Teachers found these incredibly helpful for weaker students and used them in mixed ability classes as well.

Most teachers were unhappy with being obliged to practice *ability grouping and segregating students* according to ability (Pratibha, Nishtha, and Neo-Nishtha). This segregation creates a social and psychological reality for students resulting in inferiority and superiority complexes among students. Teachers believed mostly that a class should have students of differential abilities where they could apply peer learning strategies, and the students would learn from each other.

## **Teacher training**

Teachers shared their views on all different forms of training and how this had contributed (or not) to the practices they applied in the classrooms. It seems that most teachers valued pre-service much less than in-service training, as the former was seen as not sufficiently relevant to their daily reality. It's also clear that teachers learn most from each other.

*Pre-service training:* should be more practical, and the duration of practice teaching/school experience programme should be increased for future trainee teachers. This will help them to experience the actual classroom settings.

*In-service training:* should be organised in small groups for experienced teachers. This will help in individualised learning of teachers as they are able to share practices and help resolve each other's issues.

*Teacher training for large pupil-teacher ratio:* Training is for ideal situations, and some of the activities cannot be done with a large PTR. The training should incorporate innovative teaching practices that can be conducted with a large number of students.

*Mentor teachers and resource persons* should be made aware of the socio-cultural realities of schools (such as Sarvodayas) situated in different localities in Delhi. Training materials cannot be generalised for all the schools of Delhi. They should

also customise their training programmes to fulfil the needs of the teachers. This will help significantly in strengthening capacity.

## **Inclusion**

As mentioned above, inclusive education is a crucial education policy. It goes beyond the inclusion of children with special needs (CWSN) and incorporates hard to reach children, especially those who have to work or who are from migrant families, as well as those from economically weaker sections of society and first-generation learners.

*Facilitating training for teaching CWSN:* The report shows that teachers' understanding of inclusion is confined to the education of CWSN in government schools. The teachers revealed that they have been trained (both in pre-service and in-service) about inclusion, only from the perspective of sensitisation and are not trained on how to teach these students along with the other students. Training for inclusion, such as capacity building workshops, should be incorporated and should include cross-disability (special educator for MR, specific learning disabilities, etc.) training for regular teachers and should not only be for special educators. This will help in constructing inclusive spaces within schools.

*Recruitment of special educators and increasing teaching time:* The teachers shared that often there are only two special educators available for the whole school. More special educators are required in the schools to allow more time for special needs children to get specialised help.

*Increased collaboration among special educators and teachers:* Weekly meetings between special educators and teachers help in teaching children with special needs and should be promoted so that ordinary teachers can ask for advice and are better able to support children with special needs.

*Parent-teacher collaboration for hard-to-reach students:* The teachers have reported that parental engagement of hard-to-reach students (e.g. from migrant families, child labour or those facing gender issues) is pertinent for active student engagement in classrooms. For effective parent-teacher collaboration, the needs of parents and families have to be taken into account, for example, by offering flexible meeting times or encouraging teachers to visit homes.

*Revision and extra time:* Timely revision and extra time with teachers in smaller groups or one-on-one sessions are pertinent for gaining a conceptual understanding for academically weaker students. Peer learning with stronger students is incredibly helpful.

## **Barriers**

Despite the excellent practices described in this report, teachers faced barriers applying some of what they said worked. The main reasons are listed below.

*Time constraints:* The majority of the teachers highlighted that the non-academic duties assigned to the government school teachers impede the teaching-learning process and make it difficult for teachers to complete the syllabus. Many teachers shared that they missed essential sessions during the exam time due to the non-academic duties they were required to do. Tablets provided to the teachers can be

used for record-keeping as compared to handwritten records. Therefore it is recommended *to hire more administrative staff*. Non-academic duties - i.e. anything not linked to student's education such as teaching and student teacher engagement should be delegated to administrative staff. This will allow teachers to focus on teaching, balance some staffing issues in schools and help with some of Delhi's unemployment issues.

*Funding for infrastructure* (both physical and academic facilities) should be promoted for school facilities, including special facilities for CWSN students (like ramps, extra classes, and assistive devices), smart board, transportation facilities, and lab facilities.

*Teacher accountability* should be enhanced for students' advancement and acquisition of numeracy and literacy skills up to grade IX due to the No Detention Policy.

*Exams and critical thinking:* The examination focus should shift from just scoring good marks to developing the children's critical thinking in the class. This way, teachers will focus on applying methods such as dialogic teaching, debates, discussions, symposiums, and presentations by students, rather than ending up cramming for the exam at the end of the school year.

*Parental engagement can be enhanced through PTMs and SMCs:* Parental volunteering should be encouraged in the school to build active parent-teacher collaboration. This should include capacity building workshops for parents and teachers (including special educators). This will also help in reducing dropouts (especially for hard to reach children).

The teachers' voices show that what is needed at a macro level are clear goals, the skills to translate these goals into sound curriculum and pedagogy, and taking into account the experience of teachers to focus on supporting the creation of meaningful learning opportunities. In a nutshell, educational opportunity requires an effective system or the right 'ecosystem' to support quality learning, including organisations, resources, and policies. *The last recommendation is therefore to engage with teachers' voices for policy formulation.*

## Bibliography

Aggarwal, A. (2019). *J&K not the first, Delhi too, was stripped of statehood once*. Retrieved from: <https://www.indiatoday.in/>:

<https://www.indiatoday.in/india/story/article-370-statehood-delhi-jammu-and-kashmir-1577629-2019-08-06> (Accessed on March 30, 2020)

Anand, K. (2019). *Teaching India and Pakistan relations: Teachers' pedagogical responses and strategies* (Doctoral dissertation, UCL (University College London)).

Banks, F. and Dheram, P. (2013) India: Committing to Change. In Moon, B. (Ed) *Teacher Education and the Challenge of Development*. UK, Routledge.

Batra, P. (2005). Voice and agency of teachers: Missing link in national curriculum framework 2005. *Economic and Political Weekly*, 4347-4356.

Bazeley P (2007). *Qualitative data analysis with NVivo*. London: SAGE Publications.

Bedi, A. (2019). Kejriwal's report card – how Delhi's AAP govt fared on its 70 manifesto promises from 2015. *The Print*. Retrieved from <https://theprint.in/politics/kejriwals-report-card-how-delhis-aap-govt-fared-on-its-70-manifesto-promises-from-2015/288453/> Accessed on March 31, 2020

Bhattacharjee, S. (2019). Ten Years of RTE Act: Revisiting Achievements and Examining Gaps. *ORF Issue Brief*. Retrieved from [https://www.orfonline.org/wp-content/uploads/2019/08/ORF\\_IssueBrief\\_304\\_RTE-Act.pdf](https://www.orfonline.org/wp-content/uploads/2019/08/ORF_IssueBrief_304_RTE-Act.pdf) Accessed on April, 27, 2020.

Bhowmick, S. and Yadav, V. (2019). Human Capital Formation through Public Education: How Fares India?, Observer India Foundation.

Brinkmann, S. (2019). Teachers' beliefs and educational reform in India: from 'learner-centred' to 'learning-centred' education. *Comparative education*, 55(1), 9-29.

EduDel. (2020). *Education Department, Government of NCT Delhi*. Retrieved from. <http://www.edudel.nic.in/samagrashiksha/content/2schmanagementwise.pdf> <http://www.edudel.nic.in/> Accessed on April 2, 2020

Government of India (2013) Twelfth Five Year Plan (2012 – 2017) Social Sectors Volume III. New Delhi. Planning Commission, Government of India.

Government of India (2014). Indian Standard Classification of Education Retrieved from. [http://mhrd.gov.in/sites/upload\\_files/mhrd/files/statistics/InSCED2014\\_1.pdf](http://mhrd.gov.in/sites/upload_files/mhrd/files/statistics/InSCED2014_1.pdf)

Hindustan Times. (2017). Delhi govt to start five English-medium 'schools of excellence' next year. *Hindustan Times – Delhi News*. Retrieved from. <https://www.hindustantimes.com/delhi-news/delhi-govt-to-start-five-english-medium-schools-of-excellence-next-year/story-p8zAUyZS2RKcY3v4MgP.html>. Accessed on April 3, 2020.

Juneja, N. (2010). Access to What? Access, Diversity and Participation in India's schools. *Research Monograph, National University of Educational Planning and Administration (NUEPA)*. Retrieved from. <https://azimpremjiuniversity.edu.in/SitePages/pdf/Scale-and-Diversity.pdf> Accessed on March 27, 2020

Kalra, A. (2017). Why India's Richest State Cannot Hire Enough Teachers. Retrieved from <https://archive.indiaspend.com/cover-story/why-indias-richest-state-cannot-hire-enough-teachers-47765> Accessed on April 24, 2020

Khatua, S., & Chaudhury, R. D. (2019). In Search of Quality: A study on Elementary Education in Rural India.

Kundu (2019). Deteriorating Quality of Education in Schools Are Teachers Responsible? *Economic and Political Weekly*, 54 (24), 34-41.

Lall, M (2013) India's education crisis - The withdrawal of the Indian Middle classes from Government Education, in Rachid et al. (eds.) *Educational Crisis and Reform: Perspectives from South Asia*, OUP, Karachi.

Maher, C., Hadfield, M., Hutchings, M., & de Eyto, A. (2018). Ensuring rigor in qualitative data analysis: A design research approach to coding combining NVivo with traditional material methods. *International Journal of Qualitative Methods*, 17(1), 1609406918786362.

MHRD (2012a) Vision of Teacher Education in India: Quality and Regulatory Perspective, Report of the High Powered Commission on Teacher Education Constituted by the Hon'ble Supreme Court of India, Vol. 1

Mohanty, B.K. (2019). A new army of teachers but few calls to teach. *The Telegraph*. Retrieved from <https://www.telegraphindia.com/india/a-new-army-of-teachers-but-few-calls-to-teach/cid/1730906>

Mooij, J. (2008). Primary education, teachers' professionalism and social class about motivation and demotivation of government school teachers in India. *International journal of educational development*, 28(5), 508-523.

National Institute of Educational Planning and Administration (NIEPA). (2016). State Report card, Elementary Education in India: Where do we stand? *National Institute of Educational Planning and Administration (NIEPA)*. Retrieved from. <http://udise.in/Downloads/Elementary-STRC-2016-17/07.pdf> Accessed on March 30, 2020

National Planning Commission. (2012). National Development Plan 2030: Our future-make it work. Pretoria: Presidency of South Africa, 1-489.

NCERT. (2007). *National curriculum framework 2005* (No. id: 1138)

Praja (2019). State of Public (School) Education in Delhi. *Praja*. Retrieved from [https://www.praja.org/praja\\_docs/praja\\_downloads/State%20of%20Public%20\(School\)%20Education%20March%202019.pdf](https://www.praja.org/praja_docs/praja_downloads/State%20of%20Public%20(School)%20Education%20March%202019.pdf) Accessed on March 31, 2020

Ramachandran, V. (2005). "Why School Teachers Are Demotivated and Disheartened," *Economic and Political Weekly*, 40 (21): 2141-2144.

Sahoo, N. (2020). Here's the syllabus Kejriwal govt followed to change the fate of Delhi's public schools. *The Print*. Retrieved from <https://theprint.in/opinion/heres-the-syllabus-kejriwal-govt-followed-to-change-the-fate-of-delhis-public-schools/358777/> Accessed on April 1, 2020

Smail, A. (2014) Rediscovering the teacher within Indian child-centred pedagogy: implications for the global Child-Centred approach Compare: A Journal of Comparative and International Education 44(4): 613-633

Spencer C (2007). Qualitative data analysis with NVivo. *Journal of Emergency Primary Health Care*. 5(3): 1-2.

Wolfenden, F. (2015). TESS-India OER: Collaborative practices to improve teacher education. *Indian Journal of Teacher Education*, 01(03) pp. 33-48.