FACES OF
BUDGET
PRIVATE
SCHOOLS
IN INDIA
Report 2018

Centre for
CIVIL
SOCIETY
Social Change through Public Policy

EdelGive
Foundation
An Edelweiss Initiative

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Budget Private Schools
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About Centre for Civil Society

Centre for Civil Society advances social change through public policy. Our work in education, livelihood, and policy training promotes choice and accountability across private and public sectors. To translate policy into practice, we engage with policy and opinion leaders through research, pilot projects and advocacy.

We are India's leading liberal think tank, ranked 81 worldwide by the annual study conducted by the Think Tanks and Civil Society Program at the University of Pennsylvania.

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visit www.ccs.in or write to ccs@ccs.in

About EdelGive Foundation

EdelGive Foundation, established in 2008, works toward bridging the gap between the users and providers of philanthropic capital and knowledge by bringing the skills, resources and talents of the for-profit world to the not-for-profit arena. It has established zero-cost forums for its corporate peers to engage with the Foundation and one another to identify promising grassroots organisations and direct their funds into high- impact projects. Beyond financial support, the Foundation provides NGOs expertise and advice on operational areas which are critical for achieving overall effectiveness.

For more information,
visit www.edelgive.org or write to edelgive@edelweissfin.com.

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List of Abbreviations

APS	Affordable Private Schools
ASER	Annual Status of Education Report
ASSET	Assessment of Scholastic Skills through Educational Testing
BPS	Budget Private Schools
CBSE	Central Board of Secondary Education
CCE	Continuous and Comprehensive Examination
CCS	Centre for Civil Society
CENTA	Centre for Teacher Accreditation
CSR	Corporate Social Responsibility
DCM	Decent Children Modern School
DIY	Do-It-Yourself
ECE	Early Childhood Education
FICCI	Federation of Indian Chambers of Commerce and Industry
GAPS	Golden Army Public School
GER	Gross Enrollment Ratio
GMC	Gray Matters Capital
HLC	Hippocampus Learning Centre
HNWI	High Net Worth Individuals
ICT	Information and Communication Technology
IMAX	Individualised Progressive Learning Program
IRMA	Institute of Rural Management Anand
ISRO	Indian Space Research Organisation
J-Pal	Abdul Latif Jameel Poverty Action Lab
MDG	Millennium Development Goals
MHRD	Ministry of Human Resource Development
MIT	Massachusetts Institute of Technology
MOOC	Massive Open Online Course
MRTP	Monopolies and Restrictive Trade Practices
NASSCOM	National Association of Software and Services Companies
NCERT	National Council of Educational Research and Training
NCF	National Curriculum Framework
NCTE	National Council for Teacher Education
NIOS	National Institute of Open Schooling
NISA	National Independent Schools Alliance
NTP	National Teacher Platform
PPE	Per-pupil Expenditure
PPP	Public Private Partnerships
RTE	Right to Education
SBBM	Shaheed Brij Bhushan Middle School
SDMC	South Delhi Municipal Corporation
SRVV	Shri Raja Vidya Vikas
STEM	Science, Technology, Engineering and Math
STEP	School Transformation and Empowerment Project
TET	Teacher Eligibility Test
TFI	Teach For India
TPO	Teachers' Professional Olympiad
U-DISE	Unified-District Information System for Education

Foreword

Parth J Shah | President, Centre for Civil Society

If you put five economists in a room and ask a question, you are likely to get more than five answers. You put five educationists in a room and ask them to define quality education. How many answers would you get?

There will certainly be some common parameters or themes among the answers but there is unlikely to be an agreement on some of the most critical issues. There is no one objective standard of education quality that all educationists or other stakeholders of education would agree on. How do we then define quality education?

It is certain that education quality cannot be defined from top-down. The educationists who define it today would be replaced by others later. The new educationists in power would have their own definition and what was seen as established norm or practice would suddenly change. Think of recent examples of no detention policy, requirement of Board exam in grade 10, continuous and comprehensive evaluation (CCE), shortening of the syllabus by one third, permissible weight of school bags etc. These are the changes that have happened in just last five years. The next cycle of elections would bring in a new group of educationists and the changes would start again.

Education quality has to be defined bottom-up, where give and take among various stakeholders would create shared understanding and practice of what is good education. The education providers—schools, teachers, principals, pedagogical and subject experts—should have the necessary freedom to offer different models of education. The parents and students should have the freedom and power to choose among these options.

Parents and students can articulate what good education or quality education is if they are able to explore different options by having the freedom to choose. The parents cannot have choice unless the education providers have a choice of what they want to offer as good education. What follows then is that choice—for parents and for providers—is a prerequisite for defining quality education. As long as we create an ecosystem of education, where every parent has a choice of school, choice of pedagogy, choice of curriculum, choice of assessment etc., then the understanding of quality education can be reached more organically. There has to be a bottom-up approach to defining quality rather than something that comes from top-down. However, without the first step of freedom for parents and providers, which leads to choice and competition in education, the progression to what quality education is and how it should be disseminated is moot.

An education ecosystem that can produce quality education must first and foremost value the freedom of the parents and of the providers of education. It must understand the criticality of choice and competition in the evolution of our understanding and practice of what would constitute good education.

The Indian education ecosystem, at its heart, is antithetical to freedom, choice and competition. It sees these values not just as irrelevant but as detrimental to quality education. These are the values on which the private initiative in education is premised and so the Indian system sees private education as antithetical to good education. It views private education as serving only the narrow interests of school owners, at the expense of parents, students, teachers and the society at large. It sees a common school system as the only good ecosystem for education.

Today the Indian education system is where the Indian economic system was before 1991. The Right to Education Act (2009) and the recent spate of fee control acts are akin to the Monopolies and Restrictive Trade Practices (MRTP) Act and licensing acts of an earlier era. India feared the freedom of consumers and producers in the economic area before 1991. It similarly fears today the freedom of education consumers and providers.

All private schools are paying the price of this fear of freedom. The Budget Private Schools (BPS) which serve the poor are the worst hit by this fear psychosis. This Report attempts to capture the benefits of freedom in education through the voices of various stakeholders - parents, students, teachers, principals, EdTech entrepreneurs and investors in private education. Despite being unable to meet RTE's stringent inputs and infrastructure demands, several low-fee schools have evolved into pioneering models of learning through affordable and creative interventions. Including BPS in the quality discourse and allowing them a greater stake within the system is the need of the hour. It is no longer viable to bind them in comatose regulations that stunt their growth. Above all, it is the child that is at the core of the education system - both as its beneficiary and as its victim. It is to this child that we owe a collaborative effort between the public and private spaces to foster high quality education for all.

For the Right to Education of Choice!

Introduction to the Report

For once, the rain gods stayed indoors in Chennai as children stepped into the freshly painted corridors of Shri Raja Vidya Vikas (SRVV) Public school in Karaikodi, Chennai. It was the first day of school, and 80 excited students were joining. The founders were experienced educators who had previously established two higher educational institutions, Kumaran Institute for Technology and Management (KIT and KIM). So, why set up a school now? For Principal Murugesh Babu (who was awarded Best Teacher in the year 2014-15 by the Government of Tamil Nadu), the predicament that prompted him was the lack of preparedness of young students entering colleges and universities. They were ill-equipped to face the challenge of higher education, and this, in turn, hampered their intellectual growth and skill development. Principal Babu concluded that the root of the matter lay in training provided in schools. Thus, the decision to return to the foundations of education by establishing a new school was made; where nurturing the mind and body of students would be given equal importance; where the budget would not mean scrimping on the quality of education.

This brings us to the first question of this report,

'100% reach' and 'Education for All,' are the most common metrics used when discussing education in India. But who are we reaching? How diverse are these schools? And can schools individually and collectively drive micro-innovations that improve Education?

As the sun set in the capital of the nation, Sem Haikop bid farewell to the populated lanes of Khajuri Kas. For ten years the school he had been operating, for children of migrant labourers, was now shut down as he was unable to comply with the financial and regulatory requirements governing school education. He returned to his other schools in Manipur and Assam to improve their quality of education. Schools, for him, are part of a community and aid upliftment, while teachers are his partners-in-action. Despite the closure of his school in Delhi, Haikop is committed to improving quality in his existing schools, to better the communities dependent on them.

That brings us to the second question,

When we speak of quality in education, learning outcomes is the metric used. Learning outcomes are hard to measure and harder to achieve. So how can schools meet them? What are the underlying issues that schools must address to improve quality in education?

Meanwhile, across a dusty construction site in rural Haryana, a student had innovated an automated traffic toll booth with the help of his friends. Sitting in his school's small lab, he hoped his new machine would somehow make efficient and traffic-free toll-booths a possibility. But of course, his horizon extended beyond concerns of traffic as he aspired to work in robotics. He had memorised Isaac Asimov's rules of being a robot, and with his automated booth - he was on his way to the future!

This brings us to our final question,

Children are at the centre of the education system. While we understand the limitations that currently inhibit quality education, how can we overcome those and provide students with a creative space to innovate for a future only they can foresee?

WHY READ THIS REPORT?

Over the last decade, we have achieved near universal enrollment in primary education. The rise in enrollment is partly due to the growth of private schools that have filled the 'differentiated demand' government schools were unable to satisfy. A significant portion of this demand is supported by BPS—small-medium size institutes that cater to the economically backward section and charge a low-fee from parents. The report looks at this segment of the private schools and explores three aspects in particular:

1. The reach of BPS, its diversity, and emerging models of excellence;

2. Innovations and suggestions to improve quality through a change in outlook on curriculum, teacher competence, assessment, and school transformation;

3. Entrepreneurs that look beyond curriculum and focus on areas like health and creative growth of a child.

The report leverages from the research that has already been conducted in the sector and analyses the data to frame relevant questions. To put these questions in perspective, the report features insights from 50 interviews with stakeholders from states such as Delhi, Bengaluru, Punjab, Haryana, Chennai, Coimbatore, Odisha, Telangana, Ahmedabad, Nagaland, Assam, and Kerala. The interviewees include individuals such as principals, parents and students, as well as, with the broader ecosystem of edupreneurs, investors, and foundations that work actively in the space. Each section concludes with a blueprint for change that suggests reform ideas to advance access, equity and quality of education.

Message from the Donor

Vidya Shah | CEO, EdelGive Foundation

The modus operandi of any system of education in a country is dictated by four main facets: demand, supply, ecosystem and regulation. Challenges within this system also brew as a result of these facets, as do new models of innovation to resolve them. India's current ecosystem is colossal to say the least, with multiple stakeholders (public, private, and shades in between) - all with the singular aim of empowering India's youth. With this year's Union Budget, quality in education has finally taken primacy. The government has chosen to direct its efforts towards training teachers, digitisation of education, and establishing more schools for tribal communities. While the move is welcome, it is important to recognise private players in the pursuit of quality education. The EdTech market in India has expanded in the past decade and innovators in the field have been engaging with teachers and school leaders to create learning solutions. Increasingly, the focus has shifted towards providing affordable resources for low-fee schools, and the results have been encouraging with new models of BPS providing at-par quality education to underprivileged children.

EdelGive's grant-making work in the education sector over the last ten years has focused on facilitating access to quality education (through teacher training, skill development, and life skills education) for disadvantaged and vulnerable children, especially girls, and children belonging to marginalised communities. To this end, EdelGive invests in developing both BPS, and in government schools (through specific programs aimed at improving learning outcomes by way of teacher and principal training, community engagement, using constructivist methodologies). Some of our investees in BPS-like models include the Samaritan Mission School in Howrah, which provides good quality, low-cost English education to the children of Tikiapara slum – who live in extremely poor and hostile conditions; Adharshila, an NGO run school in a remote village of Sheopur district of Madhya Pradesh; and RAZA, runs a school providing quality education to children in an urban slum of Banerghatta, Bengaluru.

Given our experiences and nuanced understanding of the field, which we have gained over the last decade, EdelGive firmly believes that a good, working relationship with the government is the best way to achieve large scale, sustainable impact. Through its ECE program – EdelGive's Coalition for transforming Education, EdelGive brings together key stakeholders including the government to deliver quality education, and enhance learning outcomes for children in four special focus districts in Maharashtra.

Centre for Civil Society has been an EdelGive investee since 2014 and the two institutions are tackling the various challenges faced by BPS. This year's report on BPS elaborates on these challenges, explores scalable solutions, and expands on the 'faces' driving these innovations. It provides an in-depth analysis of the reach and diversity of BPS in India, and investigates the possibility of scaling successful innovative BPS models. Moving ahead, we must discover collaborative spaces within the public and private sector to ensure that 100% of students enrolled in the present system of schooling receive the quality of education that they deserve.

Reach & Diversity of Budget Private Schools in India

Section one analyses the reach and diversity of BPS in India, both through existing research & statistics, and stories. It presents excerpts from interviews with different stakeholders of eight schools, showcasing the various micro-innovations schools adopt within the constraints they operate in. The last part of this section discusses the two models of excellence, found within the BPS segment—GyanShala and Muni—to inspire a quality revolution in the sector.
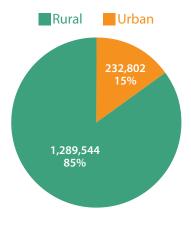
1.1
The Story of Numbers

India's schooling system is often described as "one of the largest and complex school education systems" of the world.[1] There are 1.5 million schools that cater to over 260 million students. With Gross Enrollment Ratio (GER) of 96.9% at elementary level, we are close to achieving the universal primary education target set out in United Nations Millennium Development Goals (MDG).[2]

The 1.5 million schools are not uniform and vary in size, ownership, fee, infrastructure, and curriculum. Some of the questions this section will address include: What is the rural-urban divide? How are schools regionally distributed? Who owns the schools - government or private organisations? What kind of private schools exist? How are fee levels in private schools distributed regionally? Let us explore each of these questions through the lens of statistics.

Rural and Urban Divide

Figure 1: Distribution of K-12 schools in rural and urban India, 2015-16

Source: Unified District Information System for Education 2015-16

Figure 2: Gross enrollment ratio, 2015-16

Source: Unified District Information System for Education 2015-16

Where are the schools situated? Given that 70% of Indians[3] live in rural areas, it is no surprise that the total number of rural schools outweigh the number of urban schools. Another interesting fact to note is that while we have achieved universal enrollment at the primary level, the GER starts to fall sharply post elementary level dropping to just 56% at higher secondary level.

Who Provides Education? Is it a State or Private Initiative?

Another way to understand schools in India is through the lens of ownership. Overall, 75% of schools in India are run by the government and 25% by the private sector. Of the 25% privately run schools, 6% are aided by the government. Private aided schools are quasi-government, receive public funds and have less autonomy compared to private unaided schools. The proportion of government and private schools varies at a state level. For example, over 15 states in India have more than 20% of the schools run privately.[4]

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[1] British Council 2014

[2] National University of Educational Planning and Administration 2015-16

[3] Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India 2011

[4] National University of Educational Planning and Administration 2015-16

Table 1: Private unaided schools as percentage of total schools; and enrollment as percentage of total enrollment, 2015-16

State	% private unaided schools as % of total schools	Enrollment, % in private unaided schools as % of total enrollment
Andaman and Nicobar Islands	16	19
Andhra Pradesh	24	43
Arunachal Pradesh	11	20
Assam	6	13
Bihar	5	5
Chandigarh	36	32
Chhattisgarh	11	24
Dadra and Nagar Haveli	9	23
Daman and Diu	15	30
Delhi	46	38
Goa	10	12
Gujarat	22	33
Haryana	30	52
Himachal Pradesh	15	33
Jammu and Kashmir	18	41
Jharkhand	4	15
Karnataka	23	36
Kerala	20	26
Madhya Pradesh	17	36
Maharashtra	16	23
Manipur	19	57
Meghalaya	16	20
Mizoram	26	42
Nagaland	26	55
Odisha	6	12
Puducherry	37	54
Punjab	24	37
Rajasthan	32	49
Sikkim	32	23
Tamil Nadu	19	32
Telangana	28	53
Tripura	6	10
Uttar Pradesh	32	51
Uttarakhand	22	44
West Bengal	10	7
All India	**19**	**31**

Source: School Education in India, U-DISE 2015-16, National University of Educational Planning and Administration

In the recent years, the share of private schools—in total number of schools and the enrollment—has been on the rise. Although the government runs one-third of schools, only a little more than half of all students attend government schools.

In developed countries, private schools are often the choice of the elite. However, this is not the story in India. In fact, there is a great deal of variation in fee levels with many economically backward areas observing a high growth of private schools. Private schools today serve parents across the economic spectrum, from those who work as daily-wage laborers to those who own high-end businesses. Some are migrants in search of better opportunities, and some are well-rooted third-generation families. Parents repeatedly echo terms like 'affordability' and 'quality' to describe reasons for their choice of schools. However, not all chosen schools are recognised by the government.

The diverse and complex network of schools in India raises questions on the viability of the neighborhood school system. Within private schools, some follow alternate teaching methods and curriculum; some are international schools, and others, religious schools.

How Affordable are Private Schools?

BPS are a growing segment of private schools that cater to economically backward communities and are often run by individuals from their homes. There are different ways to benchmark fee levels in private schools to identify budget schools. Some of the commonly used benchmarks include minimum daily wage, per-pupil expenditure in government schools or state per-capita GDP. Professor Kingdon finds that 26.5% of private schools in rural India charge fee lower than the minimum daily wage, giving us an idea of whether a daily wage labourer can or cannot afford private schools. If we define BPS as those with expenditure lower than government per-pupil expenditure, an astounding 79% of schools in India can be called BPS.[5]

How Many Private Schools are 'Budget'?

Official statistics, such as the Unified-District Information System for Education (U-DISE), do not capture unrecognised schools. In the absence of official extensive information, we are left with insights from several researchers who have attempted to estimate the number of BPS.

Defining BPS as schools that charge less than Rs 5,000 per month, FSG[6] estimates 1.3 to 1.7 lakh BPS in urban India. Their research finds 86% of students from families with income between Rs 9,000-20,000, constituting 70% of all urban households, attend BPS.[7] Professor Tooley estimates nearly 92 million children—30% of all children—to be enrolled in BPS.[8]

The informal estimate from National Independent Schools Alliance (NISA), based on an interview with NISA President, Kulbhushan Sharma, is even higher: an estimated 4-5 lakh BPS across the country.

Figure 3: K-12 school enrollment by management, 2015-16

Source: Unified District Information System for Education 2015-16

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[5] *Kingdon 2017*

[6] *FSG, Understanding the Affordable Private School Market in India 2017*

[7] *FSG 2017, 23*

[8] *Tooley 2017*

Figure 4: Private school fee in comparison with government per-pupil expenditure (PPE), 2014-15

	Median private school fee (Rs per month)	Government funded schools' PPE (Rs per month)

State	Median private school fee	Government funded schools' PPE	Percentage of private schools whose fee is lower than government funded schools' PPE
Andhra Pradesh	667	1174	81.1
Bihar	350	442	62.6
Chhattisgarh	358	1346	85.7
Gujarat	450	1426	89.8
Haryana	700	2264	94.2
Himachal Pradesh	558	3279	99.5
Jharkhand	446	668	65.2
Karnataka	683	1410	81.1
Kerala	700	1618	91.5
Madhya Pradesh	308	994	86.8
Maharashtra	667	1226	71.1
Odisha	333	781	86.7
Punjab	658	762	58.8
Rajasthan	375	1616	95.2
Tamil Nadu	900	1186	70.0
Uttar Pradesh	150	1092	92.9
Uttarakhand	600	2186	95.3
West Bengal	596	583	48.3
India (Weighted Mean)	417	1091	79.4

Source: Adapted from Table 9, Chapter 1, Report on Budget Private Schools in India 2017

Figure 5: The big picture of Budget Private Schools

SCHOOL

SCHOOLS in India | **1.5 million**

85% Rural   **15% Urban**

Private Schools
378,760
25%

Enrol 43% of all students

Government Schools
1,141,760
75%

Enrol 55% of all students

Private Aided schools
6%

Receive financial support from government and have less autonomy in teacher hiring and pay

Private Unaided Schools
19%

Do not receive grants from government

Elite Private Schools

Charge fee higher than state per-pupil expenditure in government schools

BUDGET PRIVATE SCHOOLS
79%

Source: Unified District Information System for Education 2015-16, FSG 2017, Kingdon 2017

Looking into the Future

Over the next two decades, India will continue to be a nation with a predominantly young demographic. Over one-third of India's population falls in the age spectrum of 15-34 years. By 2031, an estimated 350 million children (0-14 years) will enter the school system in India.[9] Are we prepared for the future? Will we be able to deliver them the education they need to live self-sufficient lives?

92 million children are in low-cost private schools today. 25% of students are enrolled in private schools, and the number continues to rise. Over 79% of schools charge a fee less than government per-pupil expenditure.

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[9] *Central Statistics Office, Ministry of Statistics and Programme Implementation 2017*

It seems like BPS will continue to sprout with support from the local communities. The solution is not a one-sided debate about which kind of education is better. It is to foster a system that allows the choice to parents and students alike, an innovative system that continually strives to improve quality of that choice.

A case in point is the Neelsanda-Ejipura community in Bengaluru.[10] Informal conversations with the community members highlighted the presence of approximately 10,000 school-age population within a 1.5 km radius. Population movements to urban areas have created many such pockets of migrant communities within our country. Following regulations, a maximum of two government schools can function in this area which can, at best, cater to about 2,000 students. What about the remaining 8,000 students? Private schools that are not too hefty on the pockets of migrant communities seem like the natural solution.

However, given the lack of space and reliance on fee as the source of revenue, it is difficult for schools to comply with the infrastructural requirements stated in the Right to Education (RTE) Act such as provision of playspace. Such issues drive the need for inclusive regulations and policies.

Another challenge we face today is that of drop-out. Enrollment in itself is not sufficient; retention of those enrolled is an equally important concern. The dropout rate, even at an elementary level, is higher than 10% in some states like Assam (13%), Andhra Pradesh (13%), Madhya Pradesh (11%), Manipur (11%) and Arunachal Pradesh (10%).[11] How can we ensure 100% retention? What do we need to do differently? Is there a role for private solutions to bridge the gap in needs versus supply?

The order of 'mandatory retention' brought with the passage of RTE Act coupled with the provision for 25% reservation for backward communities in private schools puts to fore new challenges. Millions of students will go through first to eighth grade without the attainment of age-appropriate learning levels. How do we plan to support these set of students?

These are some of the system-wide challenges that the nation needs to prepare for. Before we delve into the answers, let's take a look at different stakeholders of our education system.
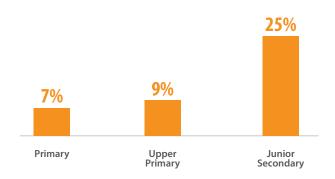
Figure 6: Average annual dropout rate by educational level, 2014-15

Source: Unified District Information System for Education 2015-16

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[10] *Interview with members of Neelsanda-Ejipura community in Bengaluru, November 2017*

[11] *National University of Educational Planning and Administration 2015-16*

1.2
The Principal's Corner

It is no surprise that BPS are diverse as each school adapts itself to the area it is located in, students enrolled, requirements of the parents, and the motivation and qualifications of the teachers.

BPS are "small to medium-sized businesses run from the owners' homes, while some have larger, purpose-built buildings"[12] with an average enrollment of about 400 students.[13] A few successful ones grow up to enroll more than 1,000 students. 69% of them do not go beyond eighth grade. Most schools are lone-standing. Only 1/3rd of them are part of a chain of schools. Even if they are part of a school chain, the average number of schools in the chain is five.[14]

The common perception that private schools are for-profit has created several negative impressions for those who believe profit and education are not natural allies. However, private schools, especially budget schools, fill a vacuum for a large number of students that the state schools have failed to fill. The proponents of BPS argue against the limiting regulations that schools are required to meet. The debates will continue but so will the schools as long as parents choose them, whether out of ignorance or wisdom.

Parents have been choosing BPS for two reasons: a dissatisfaction with the government and a perceived better quality of teaching in private schools, primarily as a result of higher teacher engagement. Parents can hold the schools accountable as payment of fee empowers them.

What is it that makes parents choose BPS? This section collects testimonials of leaders of eight BPS from across the country (Figure 7). The interviews throw light on the motivations, the vision, and the unique micro-innovations they employ in their classrooms.

STORY 1

Sri Rama Rural Academy, Andhra Pradesh: A Balance of Reading and Play

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12 *Harma 2009, 152*

13 *Gray Matters Capital 2012*

14 *ibid.*

Figure 7: Overview of school leaders interviewed

Decent Children Modern School
Driving a balance between technology, sports and academic outcomes

Sainath Public School
Focus on communication and comprehension skills

Goyala Progressive Public School
Science, Technology, Engineering, and Mathematics (STEM) education

Pilgrim School
Focus on sports and design

UniqYou International School
Push for parental engagement especially from the migrant community

Sri Rama Rural Academy
A focus on reading and sports

Reddy Jana Sangha School
Work on the quality of teaching and improve students' mental health

Chidvikas Vidyamandir
Efforts to include fine arts and skill development

Location: Chilumuru village, Guntur District, Andhra Pradesh
Class: From Kindergarten to Grade 10
Students: With 800 hostellers and 650 day scholars
Interview: Tulasi Prasad, Director, Sri Rama Rural Institutes

Located on the banks of Krishna River, Chilumuru is a green and beautiful village in Guntur district. Tulasi Prasad is a third generation school owner. His parents had expanded on the school set up by his grandfather and made it the first residential school in Andhra Pradesh. He took over the reins of the school after completing his higher education from the National Institute of Technology, Warangal.

While they follow the State Board curriculum with recommended textbooks, he often explores innovations that provide quality curriculum. For example, he has included the Individualised Progressive Learning Program (IMAX) curriculum in his school to personalize learning outcomes at scale by enabling teachers to incorporate detailed remedial feedback based on student learning levels.[15]

The campus is spread across 50 acres and has ample scope for children to play. Sports is taken seriously with cricket, fencing and handball championships. Classes are often held under the sprawling neem trees in their campus. Children spend morning hours browsing through newspapers and discuss the information they have digested to inculcate reading habits.

Tulasi Prasad also believes that children should be introduced to technology which is what the future holds. The school owns a 3-D lab and has access to the internet through WiFi. Recently, they conducted a seminar on cybersecurity and ethical hacking that inspired an eighth-grade student to innovate his ethical hack.

He argues that schools alone cannot drive change. Parents need to be actively involved. Often, he feels, parents do not focus on the right outcomes. Beyond learning assessments, he would like parents to care for the child's health and ensure they receive proper nutrition. He also argues that parents should focus on enhancing communication with their children instead of merely focusing on their school-work. It will set a good foundation as children enter their tumultuous adolescent years.

STORY 2

Chidvikas Vidyamandir, Tamil Nadu: Fostering Arts and Skill Development

Location: Coimbatore, Tamil Nadu
Class: LKG to Grade 5
Students: 183
Interview: Anuradha Ajithkumar, Principal and Correspondent of Chidvikas Vidya Mandir

Anuradha aspired to be a teacher for as long as she can remember. Her uncle had once told her that she was an ambitious person. But, she wondered, "is being a teacher ambitious?"

She completed her Bachelors in Education and subsequently initiated herself into the Montessori philosophy, a method that integrates emotional, physical, social and cognitive needs of a child. She was taught by experts Amuktha Mahapatra, Uma Shankar, and Shobana. In 1985, she commenced her career as a teacher.

In 2006, she took the next step and started her school with two children, little money, and lots of passion. She firmly believes that learning must prepare children for their future and not just for scoring well in exams. What one learns in the third grade cannot be recalled in the eighth grade unless learning itself is a stimulating experience.

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15 *Details of the IMAX programme are discussed in Section 2, page 55*

Her dream is to arouse the learner in every child, so they may engage in learning throughout their life.

The parents who send their kids to her school are mostly employed in blue-collar jobs such as plumbers, electricians, masons, housemaids, or own small businesses. The school uses textbooks prescribed by the government of Tamil Nadu, and National Council of Educational Research and Training (NCERT) textbooks for English.

The state-sponsored arts festivals organized in Kerala inspire Anuradha. She wants to teach her students fine arts, music, dance, tailoring, and more. She wants them to receive certifications for their skills, so they can capitalize on them as they grow up. Her dream is to hold an exhibition that displays her students' talents and celebrates all that they have learned over the years. If she has the budget, she would also love to extend her school until tenth grade. However, these are still distant dreams. So, she focuses on what she can teach her kids while they are there.

As a Principal, Anuradha does face challenges from parents who cannot think beyond the syllabus, exams, and preparing for entrance examinations for higher education. Her teachers are also hesitant to tread on new paths in the teaching-learning process.

Despite her numerous responsibilities, she still tries to teach. Recently, she asked fourth-grade students to pose three questions for a poem called 'Why?'. The questions she received were creative, to say the least. Here are some of the questions the children posed:

Why do trees have so many leaves?
Why do we look after babies so carefully?
What is the biggest number?

Why do people in Australia talk in English?
Why did Modi take away 500 and 1000-rupee notes?

Important questions that indeed need answering.

STORY 3

UniqYou International School, Gujarat: Driving Parental Engagement

Location: Idar, Gujarat
Class: Nursery to Grade 10
Students: 746
Interview: Jitendra Patil and Yogesh Patil,
School owners and inputs from 2 students' families

Located in a tribal community in the north of Gujarat, UniqYOU derives inspiration from the Provision of Urban-amenities in Rural Area (PURA) thought proposed by Former President of India Dr Kalam. The school focuses on value education, learning English, leadership development, and practical exposure along with theoretical knowledge.

Given its location and the unique demographic, one essential learning for the school has been the need to involve parents early on. Over the past five years, they have reached out to 300 villages, creating awareness about the value of education, inculcating reading habits, healthy living, and self-learning. They have also conducted workshops for better parenting with village community leaders in 20 villages.

The school has also seen cases of reverse migration from the cities.

Vishal Mahendrabhai Patel studied in the school for three years from Grade 4 to 6 before shifting to Ahmedabad. He came back to the school in Grade 9. His grandfather, Babubhai Patel said, "Homesickness and differences in the daily routine of urban life created a negative impact on my grandson. Financially, schooling in the villages costs 50% less than schooling in Ahmedabad. At the same time, we get at par quality education and better grooming."

Yug Janakbhai Patel's family had migrated for better employment opportunities to Himmatnagar. Two years ago, the family returned to Idar, although his father still commutes to Himmatnagar for his job. Yug is now studying in the sixth grade. Apart from financial savings, his mother is happy to be back home and feels satisfied that her son receives quality education locally.

Over time the school-leaders have realised that it is better to work with the existing system. They work closely with government schools and three Anganwadis, have conducted workshops in more than 20 government schools for art and craft, sports, and career guidance. Over 50 schools from nearby areas have participated in international festivals organised by UniqYOU in UK, Japan, Papua New Guinea, and Brazil. For teachers, they have held training courses on phonetics and on teaching language skills. These courses have proven to be effective teaching methods for children with Learning Differences.

Apart from curriculum-based education, children learn Yoga and Ayurveda. UniqYOU has also implemented a peer-learning program that groups thirty students for specialised training under a leading innovator and expert in that field.

STORY 4

Decent Children Modern School, Punjab: Breaking Barriers through Constant Innovation

Location: Punjab
Class: Nursery to Grade 10
Students: 4,000
Interview: Anirudh Gupta, CEO, DCM Group of Institutions

In the year 1946, while the seeds of partition were being sown in the minds of some, a dream for an educated India was taking shape in Ferozepur Cantonment, one of the most substantial garrisons in undivided Punjab. Born on 4th July 1915, Mr. Dass completed his graduation from Lahore and settled in this town. An avid reader, he used to frequent the English Book Depot, one of the most popular bookshops catering to both the civilians and the British Army officers. It was here that Mr Dass and his friends discussed the lack of quality educational institutions in Ferozepur. The Decent Children Modern School - an English medium school, the first of its kind in the entire area, was set up in 1946 with support from leading teachers and philanthropists.

However, before this experiment could blossom, the partition set in. The subsequent genocide, loss of property, and unprecedented flooding took Mr Dass' effort back to the drawing board. The first Deputy Commissioner of Ferozepur in post-independence India, Rai Bahadur Vishnu Bhagwan, encouraged Mr Dass to restart the school. So, he did. In 1950, the school had 201 students and 12 staff members on its rolls.

As early as the 1950s, the school had umpteen firsts to its credit. It had movie-projectors and other electronic aids to enhance learning (procured from Agfa in Germany). The school used 'Chevrolet' station wagons and tongas for transport which was later replaced by Matadors in the 1970s.

The school further experimented with several new techniques in the early 1960s and introduced allied arts like embroidery, handicrafts, clay-modeling, dramatics club and even Malkham. They started hostel facilities to help children from rural areas to study here. By the end of the decade, over 500 students had enrolled.

A team of educators from West Germany and Switzerland visited the school on January 7, 1971. In the early 1980s, students also won the All-India Gymnastics Competition, bagging several titles in table tennis and cricket. A General Knowledge Club was also formed. Students also secured top positions in central and state examinations, adding a vital dimension to its academic landscape. By 1988, the strength of the school had risen to almost 2,000 students, and it also became a pioneer in introducing IT education in the region with the inauguration of its 'Computer Lab.'

In 1991, with the unfortunate demise of Mr Dass, Mrs Kanta Gupta took over as the Principal. She introduced several modern practices. The school received the National Award for Excellence in Education in the year 1999 and became an accredited institution of NIOS.

Over the years, the school has produced numerous doctors, engineers, bureaucrats, and military officers. In 2010, the school shifted from the state board to Central Board for Secondary Education (CBSE) keeping in view the demand of the parents. Mrs Kanta Gupta passed on the baton of leadership to Mrs Yachna.

The school moved into the 21st century with a tremendous impetus to flipped learning. Mrs Rakhi Thakur took over the reins of the school in February 2016. She also initiated several Community Outreach Programmes besides setting up Atal Tinkering Lab under the aegis of Niti Aayog. The school also established a solar power plant and a paper recycling plant, making it a 'Green School'.

The years from 2002 to 2010 also saw the establishment of DCM Presidency School, Ludhiana & DCM International School, Ferozepur City followed by Dass and Brown World School in the year 2014. As the school steps into its 72nd year, it celebrates those who have helped shape its legacy from Shyam Lal (Head Clerk), Banwari Lal (40 years of service till 1997) and Raj Kumar (cook for the last five decades).

STORY 5

Sainath Public School, Delhi: Building Confidence in Communication

Location: Delhi
Class: Kindergarten to Grade 8
Students: 350
Interview: Mr Rajesh Malhotra, School Leader

Ten years back, Mr Rajesh Malhotra left the non-government organisations' sector to set up the Sainath School. Today, when we look at a school, we imagine the school leaders' job to include interaction with parents,

Pilgrim School, Nagaland: Design Thinking and Sports

Location: Dimapur, Nagaland
Class: Grade 1 to 8
Students: 800
Interview: Bithung Kikon, School Leader, and
Kaini Kheko Kikon, Principal

selection of books, and to address notifications from the government. For Rajesh Malhotra, there is another critical role the school leader should play, that is, teach. He particularly enjoys teaching English. Out of six periods a day, he ensures that he teaches for at least three. For him, communication is a crucial skill required to build confidence and to develop self-esteem.

The parents whose children study in his school range from daily wage earners, small-time workers, people in small businesses, and low-cost service providers.

He believes in helping children appreciate good behaviour and discipline. While the curriculum includes sports, and art and craft apart from academics, he stresses on the quality of the textbooks. Apart from the standard textbooks, he also invests in books from Oxford, S. Chand, and Cordova to equip teachers with the right material to teach.

Rajesh Malhotra also believes in bringing wit and humour to his classroom. Children, he believes, learn best when they are having fun. He enjoys it when he sees his students apply some of that wit and humour to people, including him.

The school was established in 1987 by Mr. Bithungo Kikon who was inspired by his father. Today, the school has over 800 students. It follows the curriculum set by the State. Mr Bithungo Kikon believes that learning outcomes need to look at three aspects - mind, body and soul. A school requires good teachers and the right infrastructure to achieve holistic growth. To inculcate creativity in children, he brings in design thinking as an element of change.

The parents whose children study in his school are mostly office goers or businessmen.

To promote the values of inclusiveness and creativity in children, the school organised a program called

'Difference Screen' in 2015. The program explored the dynamics of place, landscape, identity and culture and how that finds expression in the works of artists. Through film and video screenings on a worldwide journey, across 20 countries over 2.5 years, accompanied by talks and presentations by artist-filmmakers, it gave the students first-hand interpretation of a selection of the works. The sessions were interactive with dialogues, participation and feedback building platforms of exchange.

Sports are a big equaliser in Mr Bithungo and Ms Kaini's view. The school leadership encourages students to take up a game, and finds that the schools students excel at many sports.

Unlike the experience of schools in other states, they have no issues with the State government's policies. However, finding employment is a significant issue that students face as they graduate. Most of them still seek government jobs. The growth of home-based industries is creating some jobs within the service sector, also supported by the increased tourism. Still, their efforts are isolated and far from mainstream.

STORY 7

Reddy Jana Sangha School, Bengaluru: Improving Teacher Motivation and Children's Health

Location: Koramangala, Bengaluru
Class: Nursery to Grade 10
Students: 764
Interview: Jessy George, Principal, and
            Mita Das, Ragini, Teachers

Nestled in a busy street of Koramangala, traffic makes for a noisy backdrop before one turns on the road to find the quiet corner to find the Reddy Jana Sangha School.

Principal Jessy George has the air of happy efficiency. Her 30 years' experience in the education sector includes 14 years as a Principal of various Army schools. She believes that teachers are the main driving force behind a child's education. When she joined the school in August 2016, she found varying degrees of motivation among teachers. English was not the preferred language of communication for teachers or students.

Since then, she has actively engaged the teachers in several training sessions and subject-specific workshops, including workshops on communication and language skills with Kadadi Path. She is also forming a cell for cross-training all teachers and works with individual educators and counsellors. She aims to remove the fear of examinations and instill confidence in children. Armed with a Masters in Psychology, she believes students are not 'weak' when it comes to learning; some just take more time to absorb than others.

She makes it a point to observe the behaviour of her students. In this respect, she has set up a zero period led by students. During this time, students engage in peer-learning while teachers linger in the background and get involved only if their help is needed. She has also

conducted Spell Bee tests and included the different activities based on listening, speaking, reading and writing to learn a language. Four rooms exist for audio-visual sessions, and higher classes have integrated smart classes as part of their curriculum. Given the background that some students come from, they find it difficult to study after reaching home. For them, she has engaged motivated teachers to aid them after school.

However, she did not randomly implement these new initiatives. She keenly listens to the parents. For example, she remembers a parent calling her saying that her son did not want to come to school as he lacked new clothes for his birthday. She stopped the practice of celebrating birthdays with fancy clothes.

Another struggle that she faces is the automatic retention policy under the RTE Act for students. Even as she tries to motivate teachers and bring improvements in the curriculum, she finds it tough to motivate children as they know they will be promoted automatically to the next grade.

School safety and health are essential concerns for her. She has installed CCTVs, washrooms with sweepers and conducted a health check-up in partnership with Lions Club.

She is happy that her children are not just becoming strong academically but that many of them are also doing well in sports. The string of medals and trophies are a testimony to that. The school also has a membership of the St. Johns cricket academy.

There are scholarships ranging from Rs 8,000-12,000 for students who perform well academically. The Sangha also has a chain of colleges, and a polytechnic institute, that offer seats to students who perform well.

Many of the teachers have been teaching in the school for decades. For instance, Ms Mita Das joined in 1995 as a Social Science teacher. She promotes active questioning

as a tool to encourage participation. She remembers women's rights as being a critical debate in her class with viewpoints that were strong and persuasive.

Ragini has been teaching since 1997. Her subject is Hindi. Students in Bengaluru are not native Hindi-speakers and it is therefore a difficult language for them. She encourages them to write and speak through drama, such as one on Gautam Buddha recently.

STORY 8

Goyala Progressive Public School: A Story of a Principal, Mr Yudhvir Singh

Location: Palwal, Haryana
Class: Pre-primary to Grade 12
Students: 2600
Account written by Mr Yudhvir Singh, School Leader and Director

❝ Three hours from Delhi, far from the crowded roads, one does not need Google Maps as any resident can show the way to the school.

Over 2,600 students study in this co-educational, CBSE affiliated school situated in Palwal, Haryana. My wife, Prem Lata Chaudhary and I rang the first school bell in 1993 with nineteen students, most of whom were first-generation learners.

I served in the Air Force and traveled across different states in India for most of my professional life. When it was time for retirement, I wanted to come back home. I did not have a defined idea of what I wanted to do. We had some ancestral land, and I realized that maybe I could set up

a school for my own community. That's how we started. The school began with an idea, a vision, and little money.

Today, my students tell my story better than I can. On one hand, we have students who are passionate about robotics. In fact, because of the passion children come with, we were one of the ten schools selected by Niti Aayog from Haryana for setting up an innovation lab. On the other, there are those who choose sports as their focus. My job, I believe, is to give my students the best possible platform so they can realise their dreams.

The fee structure of the school ranges from Rs 1,450 per month in LKG to Rs 2,050 in grade 12. The school is not centrally air-conditioned, but it has bright and airy classrooms.

We have tried to bring in infrastructure that includes smart classes, well-equipped science labs, computer labs, libraries, RO water coolers, necessary sports infrastructure, a robotics lab, 3-D labs for practical experimentation and learning, and more!

It has not been easy, but managing operating costs helps us invest in bettering the curriculum, and in infrastructure for our students. Take our solar panels for example. Today, the school is self-reliant for its electricity requirements and has the infrastructure for rainwater harvesting that helped save over Rs 30,000 per month in operating costs.

I believe my teachers are my brand ambassadors. Many of them have been here for over a decade now. The least I can do is ensure they are financially stable and satisfied with their employment. We pay salaries according to the seventh pay commission and focus on in-service teacher training and curriculum planning.

The best success story of a school are its ex-students. I am happy that my ex-students are not only shining the light but also come back to the school that they once studied in. Mr Jagdeep More, an ex-student from my school, is

now a teacher in the school. He is a CBSE resource person and trainer, and pens articles for several newspapers and magazines.

I do focus on discipline and holistic development of the students; you can call it the influence of my armed forces training. I believe that both scholastic and co-scholastic domains can be taught through teaching methodologies and pedagogical practices.

I want my school to be a happy place that blends the traditional and the modern, the spiritual and the scientific, the power of prayer and the power of technology, the learning of scriptures and the learning of Science, Technology, Engineering and Math (STEM) subjects.

My view is that the future of education rests in the amalgamation of science and ethics. This year we had chosen the theme "Pragati" for our annual exhibition.

The students who study STEM subjects also recite Sanskrit shlokas. They are expected to imbibe within themselves the qualities of integrity, honesty, trust, tolerance, and compassion. We have also devised a curriculum of teaching life skills integrated with the teachings of the Bhagavad Gita. Spiritual advancement of students is an integral part of our education policy.

The school offers various hobby options in the form of clubs that include abacus, Vedic math, photography, bakery, health and nutrition, classical dance, vocal music, painting etc. Students regularly participate in district, state and national level competitions and bring back many laurels. Participation in events like Model United Nations, science fairs, and adolescent peer education programs are also encouraged. A grade 5 student, Rohiteshwar, has been selected to receive an award from the President of India this year. Another student, Palak, received appreciation from the Governor of Haryana for her artwork. Besides them, many students of Goyala Progressive Public School

have represented the school at zonal, district, state and national levels. Some of the students have developed a 3-D model for automated traffic control booth. What more can a school leader ask for?

1.3
Emerging Models of Excellence

The previous section shows small initiatives, at a school level, in health, delivery of curriculum, and approach to teaching. The introduction of elements like physical activities and design thinking define the uniqueness of each school and help students go beyond the assigned curriculum. These changes bring meaningful impact in the lives of students enrolled.

In this section, we look at solutions that have gone beyond a single school and have been emulated in other schools, impacting many more students and perhaps offer cues to the challenge of reduced quality education that plagues us today. Some of these innovations often do not come in the limelight as the schools do not have chains. The two models—Muni and GyanShala—discussed here are innovative and at the same time, scalable. They may be seen as schools capable of creative destruction of the existing outdated school system.

The Muni Model

The Future:
Marked Absent No More?

Interviews with Ashok Thakur, Founder Muni Schools; Kulbhushan Sharma, Mamta Sharma, Harpal Singh, Vishal, Rajesh, Saurabh Kapoor, Shaveta Kapoor, Suresh Chander, Founders and school leaders for 6 Ambala schools profiled in this section.
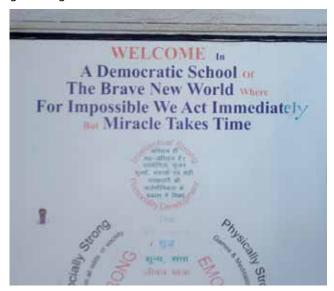
Nestled into a narrow, busy lane in Delhi's bustling Mohan Nagar, there is a feeling of complete surprise when you come across the building of the Muni School amidst tightly packed houses and small shops. The most noticeable thing as you enter the office of the school is the board on the wall. It is called the "Research and Development Wall." It is meant to serve as a wake-up call for school authorities.

The Muni School is an institution engaged in innovations, with an in-depth focus on research and development. It is how they dream of the future as they work in the present. Education gives seed to innovation, but schools are often so busy in their day-to-day operations that the future is mostly marked absent. This is, however, not the case for the Muni School. So how does this model work?

As I entered the school, two grade 6 students, best friends, were entrusted with showing me around the school. One wants to be a judge. She already loves words and had no hesitation in speaking to me and answering my questions in English and occasionally, in Japanese. Her friend wants to be a doctor and wants to take homeopathic medicine and acupuncture to Germany. She already knows German.

Why acupuncture and why Germany? How do these children have such lucid dreams and goals? Well, these are the small details that the Muni School seems to have gotten right.

Ashok Thakur, Founder of the Muni School, served in the army. Education for him had never been about degrees and assessments. He has several reservations about the present system of schooling.

The Muni model was not built overnight, and it did not have multiple repeated frameworks. It stemmed from Mr Thakur's deep beliefs on education. After his short stint with the Indian Army, he returned home to his family

business. But it never really became his business. He received a small piece of land from his family where he brought his vision to life. The Muni school was inaugurated with two employees from his family's business. In its first few years, the school ran into losses and was called the "*dukandar*" school. To make things work, every summer Mr Thakur would fly to Dubai to earn money. It wasn't an easy journey. After six to eight years of hardships along with the support of inspired teachers from within the community, the Muni model finally started running successfully.

The child is at the core of this model. True to the "Ekalavya" of Mahabharata, he believes that children are capable of learning much more than we allow them to pursue. He thinks that the child needs to grow up, not just to secure a job, but to also be able to serve the community and be a compassionate and moral human being. By learning these values from childhood, as well as by learning multiple languages, children are better equipped to not only survive but to thrive in this fast-changing world. The Muni model does not claim that its children will be the best academic minds, but they do want to nurture happy and morally upright citizens.

As I was leaving the school, I met a parent whose child had studied in the school. He is a doctor. His child was studying in a different school before he shifted her to Muni School. His family was initially not happy with his decision. Today, his daughter has secured admission in a good college and is studying to be an engineer. The father is now an advocate of the Muni model.

The Muni model is now being replicated in ten schools, both government and private. Let us examine the model through the experience of six schools in Ambala that are currently implementing it.

1. **Shaeed Brij Bhushan Middle (SBBM) School:** When NISA President Kulbhushan Sharma (school leader, SBBM) wanted to adopt the Muni School model, he didn't just do it himself; he convinced five more schools in Ambala to join him. His motivation to focus on quality education came from his teachers. He studied in Decent Children Modern School, Punjab (profiled earlier), one

of the earliest private schools in our country. Years later, he still remembers the inspiration he derived from his teachers. For Kulbhushan Sharma and Principal Mamta Sharma, the Muni model brings back focus on some of the things they loved doing as children, like gardening where each child is given responsibility for a small plant as a part of building engagement with the community. So is the habit of practicing acupressure with people in the neighborhood. The parents of children who come to the school are mostly laborers. The students dream of joining the army, becoming doctors, and lawyers. The school leadership team love the fact that the Muni model is centered around first building confidence in children and then enabling them to pursue academic brilliance.

2. Inaugurated in 1990, **Damayanti Devi Middle School** started with just four rooms. Previously, the would-be Principal, Suresh Chander used to give tuitions to children. As his reputation as a teacher spread, more children began to come to him. A school seemed like the next logical step. Today, he is implementing the Muni Model in his school. He loves the focus on moral education that the model stresses on. Parents also appreciate positive change they observe in their children. In the first Parent-Teacher Meeting (a month after initiating the experiment), the parents reported that their children were not only learning English but also teaching them. For the Principal, a fluent command over the English language is a great way to instill confidence and self-respect in students.

3. Started in 1988 with 62 kids, **Sri Geeta Nand Public School** has been the family's commitment for over two generations. For school leaders Saurabh and Shaveta Kapoor, the Muni model transformed into reality with Akash (name changed), a student in fifth grade. Akash had a speech defect, a defect that other children teased him for. They did not mean to be cruel. They just found it funny. With the buddy system in the Muni model, the class was split into a parliamentary system. The course does not move ahead if a few children understand a concept. Everyone has to follow. Akash suddenly found himself with friends who wanted to help him, not laugh at him. It has only been a few weeks but teachers are noticing a positive change in Akash and the class' behaviour towards him. The school also realised the difference between their teachers; some of the younger teachers are rapidly embracing the model while the older teachers are taking more time to adapt.

4. Golden Army Public School (GAPS), established in 1988, has classes from preschool to eighth grade. There are two things that one can spot immediately on entering the school. The first is the open playground where children can not only engage in sports but also role-play different real-life situations like going to the bank or to a post-office. The second is a board with the declaration "your competitor" as you walk in. Beneath the board is a mirror that highlights an important message - you are your competition. A key tenet of the Muni model, Mr Vishal, Principal, shares, is "to bring change in my students and my school, I need to first change myself." For him, the Muni model has helped him undergo self-reflection. His commitment to safety and security is visible in the way each child's name is called out aloud at the end of the day to ensure the child is being picked up by their guardian.

5. **Shree Vishwakarma High School**, inaugurated in 2002, operates classes from nursery to the tenth grade in Sohana village. Sohana is home to a population of 50,000. Residents thought it was impossible to establish a high-quality school there. Mr. Rajesh, who established the school, previously taught in government schools. He likes the way the Muni model pedagogy focuses on the principles of listening, speaking, reading, and writing and how homework is split into four components - understanding, planning, learning and comprehending. A problem is first understood and then debated using local examples and self-learning. The teachers' job, he feels, then changes from spreading the culture of rote-learning to creating interest in learning through everyday situations. For example, for a class on nutrition, the teacher might get grains from home that children also recognise to make the topic interesting for them.

6. **Sukhpal Senior Secondary School**, opened in 1986 in Ugala, has approximately 7,000 residents. Here, Principal Harpal Singh has been enthusiastically implementing the Muni model. His belief in the model stems from a disturbing experience that he and his teachers had. He had a student, less than ten years old, whose mother had passed away and her father had traveled abroad for his job. She was staying with her relatives. For a few days, her teacher noticed her crying in school and decided to speak to the child. What she heard was horrific. A relative was abusing the child. The school decided to take a stand. The Principal counseled the relatives but found them unwilling to accept the reality. So he called the child-helpline and, despite receiving threats, he got the child's statement recorded. For him, saving the child's life was more important than taking a safe diplomatic stand. For Mr Singh, the Muni model is embedded with this very tenet of respect for others. He believes in instiling the right values in children before they become adults who are less likely to amend their behavior.

GyanShala Learning is a Priority

Interview with Dr Pankaj Jain, Founder, GyanShala

In the states of Gujrat, Bihar, Uttar Pradesh, and West Bengal, over 45,000 children from needy families living in the slum areas of nine cities are a part of another emerging model of budget education–The GyanShala model. GyanShala's practices have been adopted in 7,300 government schools in Bihar, and in over 1,000 government schools in Uttar Pradesh. Encouraging results have also been realised in 38 Ahmedabad Municipal Corporation school trials.

According to Census 2011, "one in four children of school-going age is out of school in our country – 99 million children in total have dropped out of school."[16] Add to this the 72 million people who migrate from rural to urban areas and work as daily-wage labourers.[17] Children often migrate with their parents, leaving behind not just their homes, but also their chance for education.

The out-of-school children are the key focus for GyanShala.

Dr Jain's philosophy of education is simple. Uniform, food, certifications are all 'frills.' Education should connote better learning outcomes. Otherwise, it is not only a failure to provide quality education to the economically deprived children but also lost economic growth and possible social unrest. A significant problem, he believes, is the absence of a model that ensures quality on a scale at modest cost and thereby, failing government and private schools. According

to him, schools should not aim to provide a better education than their peers. Instead, there should be a continuous effort at bettering the quality; that alone will drive performance.

Since 1999, Dr Jain has been working on building such a model, initially, for grade 1 to 3, and then for grade 4 to 7. It took five years to develop material for grade 1 to 3, and a decade for the middle school curriculum to roll out. Reform in education is one for the long haul, he believes.

Dr Jain grew up in Uttar Pradesh. An engineering degree, a career in Indian Space Research Organisation (ISRO), and a Doctorate later, he gave up an attractive offer just to work with Dr Kurien, the father of the White Revolution. He also worked with the Institute of Rural Management Anand (IRMA) till 1994, and then travelled abroad as a teacher and consultant with several global institutions.

With his vast experience in tow, Dr Jain returned to India and laid the foundation for GyanShala. The key differentiating factor in GyanShala is the curriculum and how it works within the existing community. A design team of over 30 education professionals helped him to develop standardized lesson plans. He divided the teachers into two groups. A group of motivated women from within the community with strong interpersonal skills formed his first line of defense. A category of experienced teachers worked with these community

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[16] CRY 2017

[17] American India Foundation 2017

teachers to address the more complex questions and to support them.

What they lacked in teaching expertise, they made up in passion and involvement of the local community. Dr Jain believes in placing greater focus on raising learner ability. He has also re-fashioned teacher-principal roles by delinking curriculum-lesson planning from administrative requirements for teachers and creating a six-tier academic team.

The multi-tier curriculum and lesson design-planning team lay the foundation of high-quality teaching for all grades. It also enables course corrections through supervision of all levels.

GyanShala believes in possessing only necessary infrastructure. Rented classrooms, with proper lighting, within the community are suitable work-spaces for them. The focus stays on improving the curriculum. Like the Muni schools, GyanShala model has also worked for government schools. The classes are close to the homes of students to facilitate regular attendance, particularly of girls, and to minimize social barriers to education. Independent assessments are conducted to bring accountability for improvements. The emphasis is on learning and not on expertise, on ongoing teacher training rather than on long-term teacher education.

Each child does over 600-800 worksheets each with 8-10 questions, in a year. It is not a recognized school. They operate through National Institute of Open Schooling (NIOS). The teacher does not speak for more than thirty percent of the time. While worksheets are practiced throughout the year, they have two exams with an oral test in between.

The results speak for themselves. GyanShala partnered with Educational Initiatives to measure the impact on learning in students in the programme schools. The ninth phase of the assessment was conducted in March 2017 and covered students from third, fifth and seventh grades in schools where the medium of instruction was Gujarati. The students were tested in Maths and Science with the Educational Initiatives standardized assessment benchmark, ASSET scores.[18] Students from the fifth and seventh grades were also tested for language. The results show minor differences with the benchmark.

The other critical insight Dr Jain has is the use of the local language of instruction for lower levels of education. He believes that learning outcome is higher if we can teach children in their local language. English can always be introduced later. As for technology, he feels it does not really add so much value to a child in the early years and can be integrated into the curriculum in the senior classes.

Table 2: Comparison of GyanShala (Gujarat) score with Assessment of Scholastic Skills through Educational Testing (ASSET)

SUBJECTS	GS-Gujarat			ASSET			Difference with ASSET
	Avg. (%)	SD	Average Scaled Score	Avg. (%)	SD	Average Scaled Score	
Maths 3	41.4	17.8	475	46.5	14.7	500	-25
Maths 5	39.4	16.3	472	44.6	15.9	500	-28
Maths 7	29.3	8.4	452	36.2	11.8	500	-48
EVS 3	46.6	18.4	464	54	15.5	500	-36
EVS 5	39.7	11.7	456	45.9	20.6	500	-44
EVS 7	26.5	7.2	425	36.1	12	500	-75
Language 5	36.3	18.8	427	55.3	6.9	500	-73
Language 7	46.3	19.8	491	48.2	14.1	500	-9

Source: Test for student learning, Educational Initiatives, Report submitted to GyanShala (Gujarat), March, 2017

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18   *Educational Initiatives, GyanShala, Gujarat, 2017, page 1*

The parents whose children come to GyanShala include daily wage laborers, autorickshaw drivers, and domestic workers. For GyanShala, it is essential to demonstrate to them the real improvement their children can have in learning outcomes if taught right.

The GyanShala website also highlights the indicators of performance from noted international research and funding organisations:

"JPAL of MIT-USA: GyanShala children score 100-150% more marks compared to government schools.

ASSET, EI-India: GyanShala children in grade 3 on par with India's best CBSE elite schools, over 2011-2015

CfBT–UK (2010 & 2013): GyanShala program on par with 35% UK public schools, and 50% Dubai International Schools."

What is the cost of this model? "GyanShala charges a nominal monthly fee of Rs 100 (US$2) per child in middle school. A child costs GyanShala INR 2,800 (US$56) per year in elementary school and 4,000 (US$80) in middle school (inclusive of class rent, learning material, and stationery)."[19]

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[19]   Ashoka India, http://india.ashoka.org/fellow/pankaj-jain
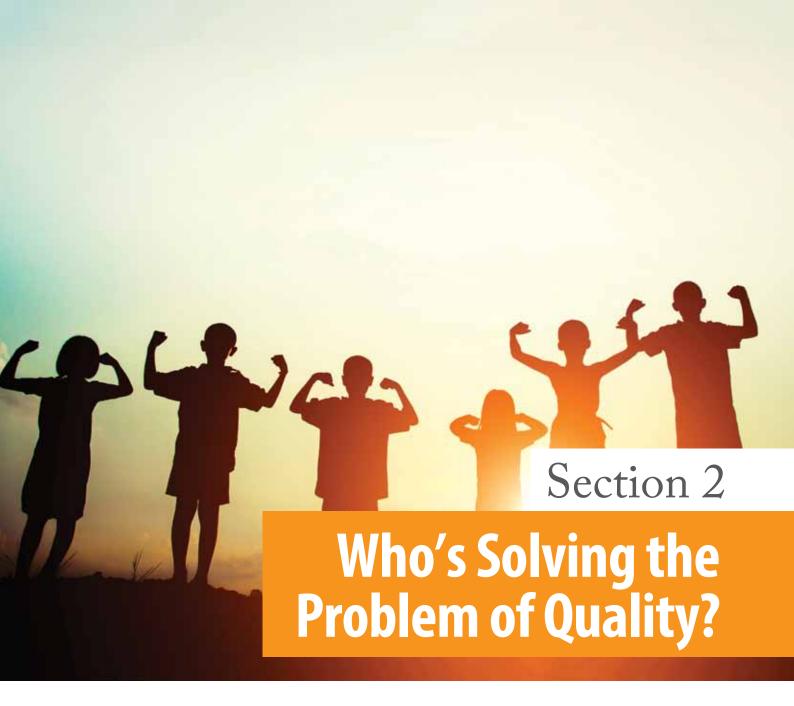
1.4
Blueprint for Change

The success of the measures taken by the two schools are reflected in the adoption by other schools and also, through parents' continued support of what one may call 'alternative education.' As elaborated earlier, different schools have chosen any one or all of the elements for reproduction in their own schools. This section summarises and compares the different facets of the two interventions.

Table 3: Comparison of Muni and GyanShala models

PARAMETERS	MUNI MODEL	GYANSHALA MODEL	COMPARISON
CHILD-CENTRED MODEL			While both the models are focused on children's' infinite capacity to learn, the GyanShala places major focus on curricular education while Muni model focuses more on child behaviour and moral development.
INFRASTRUCTURE			Both the models are similar in the way they give lesser importance to infrastructure. A clean, well - lit learning environment is enough, according to them.
CURRICULUM			In the GyanShala model, the curriculum is at the centre of the change. Hence it is designed from scratch. In the Muni model, the existing curriculum is followed. But there is more focus on language and confidence building.
RESULTS			GyanShala model places importance on results and quality. These are externally validated. While the Muni model has also started showing good results, the key focus of the model is more on children moral development.
MORAL EDUCATION			For Muni model, this is the biggest pillar of change. For GyanShala, this is not a separate focus. It is part of the overall curriculum.

PARAMETERS	MUNI MODEL	GYANSHALA MODEL	COMPARISON
FOCUS ON CHILDREN'S HEALTH			For Muni model, children learning healthy living habits is important. For GyanShala, this is not an explicit focus.
TEACHER QUALIFICATION			Both the models follow the child-centric method of learning where the teacher is the facilitator, not the sole provider of knowledge.
COMMUNITY FOCUS			Both the models are strongly integrated within the community. The parents, the teacher and the students are not participants, almost evangelists for the model.
FOCUS ON ENGLISH			GyanShala model does not believe English is helpful at younger levels. Muni model places great emphasis on it.

Section 2

Who's Solving the Problem of Quality?

After a discussion on the spread, nature and variety of BPS, section two looks at four pillars of reforming quality within schools: 1) Curriculum and Teaching Resources; 2) Teacher competence; 3) Personalised Assessment, and 4) School Transformation. It features interviews of innovators and visionaries in all four segments, who through years of experience in the space now look at ways to bring sustainable change. The concluding part summarises how school owners currently assess, evaluate, and implement interventions and brings to fore some challenges for the reader to reflect on.

2.1
The Mystery of Quality Education

There are several studies that establish a private school advantage—even for low-fee schools— over government schools for learning outcomes and the findings suggest marginal to significant differences in outcomes.[20] While comparisons are useful, the fact remains that the base of outcomes is low for all schools, government or private, except for a handful of private schools. ASER 2016 shows that only 63% of Class 5 rural private school students can read a Class II text. Two of our best states—Tamil Nadu and Himachal Pradesh—were second from the bottom in the Programme for International Student Assessment (PISA).

Sir Ken Robinson, leading educationist, defines the three pillars of formal education as - (i) teaching, (ii) curriculum, (iii) assessment.

Is it possible to solve the drawbacks in learning outcomes by making outcomes an integral part of the teacher-training process? Can we empower, help and provide solutions for our teachers to improve learning outcomes? What are the systemic interventions required to bring a change in the actors responsible?

Figure 8: Percentage Children in Class 5 who can read Class 2 level text

Source: ASER 2016

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20   Studies that show a positive private school effect include Desai, Dubey, Vanneman, & Banerji, 2008; French & Kingdon, 2010; Goyal, 2009; Kingdon, 1996; Muralidharan & Sundararaman 2015; Rajagopalan and Agnihotri 2014; Chudgar and Quin (2012) finds no statistically significant private school effect for coefficients at 5% level in urban areas but finds positive and significant results for rural areas for 2 out of 3 variables.

A TEACHER'S STORY

I belong to a district in the southern part of Haryana. Compared to the prosperous neighbouring cities like Gurugram and Faridabad, my district was second-to-last in the 2017 Learning Level Examination. Teachers scored a mere 41% in the learning level indicators. Consequently, with low levels of education, crime rates are high.

My mother, a teacher, has been my role model. While I was growing up, my district did not have many quality schools. Then in 1993, a new school opened up - the Goyaya school. My mother started teaching there. She liked the school. She was convinced that I should be enrolled there. When I joined the school in third grade, most children in the district spoke Hindi. English was a distant dream. I still remember my English teacher, Pratibha Dabas. The challenge of teaching the language did not easily daunt her. Her classes were not just about learning the language, but also about loving it.

Though I loved writing in English, I pursued the standard career choice for 'good' students. I completed my degree in engineering and joined a multinational corporation in Mumbai. In the eyes of my family, I was a success. However, I did not feel like one as I stared down at my computer screen for hours at an end. Within two years, I quit my job. My dream was to become a teacher, like my mother. From mild jokes to strong opposition, the reaction of my extended family was adverse.

I started by reading first-grade books and worked my way up. I got my first teaching assignment in a remote village of Haryana. I still remember the clincher,

"What subjects can you teach?" the principal asked.

"I can teach all subjects, till tenth class," I replied.

Did the principal believe me or was it because of a faculty crunch? Either way, my dream came true. I taught Mathematics, Science, English and Hindi. It took me a year to learn the intricacies of teaching.

Soon enough, my old school had a vacancy for an English teacher. Coming full-circle, I applied for the post and got selected. Was I teaching or re-living my good old days? Were the students asking me the same questions I had asked my teachers?

Every day I see a younger version of myself in my students, sitting on the same benches in the same room asking me what they should do with their lives. Even in the mischief and naughtiness of my students, I see my younger self.

My students are my motivation to continue learning. I have completed my Masters in English Literature and have also earned a degree in Education. I have also qualified the Central Teachers Eligibility test and became a CBSE Master Trainer (Resource Person) certified to train teachers, principals and educators in various aspects of pedagogy. My school promoted me to the role of a Senior Coordinator. With these changes, I re-discovered my lost dream - that of writing. Soon, I was writing for magazines and national dailies. I found my students reading my articles with joy. Some of them were motivated to write blogs and send in articles of their own to newspapers. I could not be happier. I believe in a unique model of child assessment. I always try to award 'A Grade' to my students in the internal examinations, tests etc. Once a child has tasted success they feel inspired to push for more. This model works for the 'not so bright' students as well. They draw motivation from this and work hard to get an 'A' even in the external examinations.

Honestly, school time is the best time to explore choices and to expand one's horizons. In remote cities like mine, students still linger on choosing Science subjects for their higher studies. Parents are unable to see beyond a medical or an engineering degree. I motivate my students to follow their heart and pursue a career of their choosing. One of my students is studying Photography, and another is pursuing a degree in Nursing. I feel that a change is coming, albeit slowly. When I was training my students to participate in the 'Model United Nations', many of them dreamt about being in the UN one day. It gives me immense happiness as despite hailing from a small town, my students are dreaming big. My students speak up against prejudice. That's my reward. Even after seven decades of independence, we have been unsuccessful in giving our children the education they deserve. Children are hungry for knowledge but do we teachers share that hunger?

The jibes and comments I faced when I declared my dream of becoming a teacher had stopped now. But what continues to motivate me is the stories of my students, excelling in their lives. This gives me Godspeed.

- Jagdeep More, Teacher at
Goyala Progressive Public School,
Palwal, Haryana

Jyoti Thyagarajan, co-founder of Meghshala - an app with digital lessons based on national curriculum, shares in an interview, "In my entire career as a teacher, I might have got the chance to impact about 800 kids. How many teachers do you think we need today? Technology can at best be an enabler for providing learning, but it can never remove the need for teachers."

Teachers in the system are currently responsible for, on one hand, completing the curriculum, and, on the other, they are burdened with

the increasing need for certifications. Simultaneously, they are also expected to be 'visionaries' and to inspire students. Are there solutions that can benefit both teachers and students, and help improve quality of the existing curriculum (thus bettering learning outcomes)? This section presents four ideas that may help us walk a step closer to better education:

1. **Curriculum and Teaching Resources:** Resources that can be used by teachers in classrooms

2. **Teacher Competence:** Enabling teachers to upgrade and improve their competence

3. **Personalised Learning:** Solutions aiding in personalised learning outcomes for students that can also assist in remedial education

4. **Holistic Transformation of School:** Going beyond teachers and students, and bringing about holistic improvement of the school for sustainable change

Depending on the current capacity of the school, one or more of these methods can be utilised to improve quality, competence and results.

Curriculum and Teaching Resources

In the past few decades, a consistent gap in our schooling system has been the lag in updating the curriculum. An average teacher completes over 200 teaching days in a year to manage the prescribed syllabus. This often leaves no room for teachers to innovate and inspire their students. The government and private sector have collaborated to develop several digital platforms to introduce tools and create an online community to aid learning of teachers and improve outcomes.

Societal Platforms

One solution, proposed by the Ministry of Human Resource Development (MHRD), is the **National Teacher Platform (NTP)** - a scheme to make educational resources open and available to all teachers. The portal aims to create a collaborative environment for peer learning, to enable continuous self-learning through online courses, to make available classroom toolkits and dashboards for learning and self-assessment.[21] The subject matter will be benchmarked by the National Curriculum Framework

(NCF), while the courses will be mandated by the National Council for Teacher Education (NCTE)." Using this, teachers can not only schedule courses at their convenience, but can also use the material they need to prepare for the Teacher Eligibility Test (TET).

EkStep Foundation is an initiative of Nandan Nilekani that will focus on the development of 'open knowledge and societal platform[22] assets' to bring together actors from different areas to create impact at scale. The idea is to create a digital platform with content, bring together teachers and students, developers of personalised content, and various organisation including government, NGOs, and institutions. In primary education, it has developed K-5 innovative learning resources and, GENIE, another application that provides on-demand access to learning material. Organisations can also register themselves as creators. The content made available will be classified according to language, subject and grade.

Central Square Foundation (CSF), in partnership with the government, has developed **Diksha.gov.** Launched in 2017, it focuses on teacher education and provides open, modular and scalable technology to state governments and other organisations to integrate teacher-centric initiatives.

While the intention is noble, the projects are still in their early stages to have a substantial impact. In the long-term, a lot will depend on the curation of material, the ease of distribution, the ability to drive online engagement, and user acceptance of the portal.

Classroom Solutions

Jyoti Thyagarajan, co-founder of **Meghshala**, seeks to impact over 100,000 teachers by 2020.[23] Using the ubiquitous mobile technology to her advantage, she has built 'teach-kits' in Math, English, Social Studies and Science in both English and Kannada that are accessible to teachers on their phones. These teach-kits are tagged according to the curriculum to aid teachers in planning their lessons. Teachers are also given projectors so that they can use these lessons effectively in classrooms. "Innovation is the key need for our education system. And before we demand that from students, we need to empower our teachers," she says. Meghshala currently hosts 2,000 lessons and is available in over 100 schools.

There are several other EdTech organisations, similar to Meghshala, which are working to create subject-level

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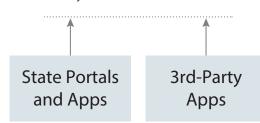[21]   Ministry of Human Resource Development 2017

[22]   Societal platforms are different than commercial platforms, such as YouTube or Uber, in a sense that they focus on creating social change and are less restrictive.

[23]   Interview with Jyoti Thiagarajan, Co-founder, Meghshala

Structure of National Teacher Platform

- *States can extend and build their own portals and apps as required*
- *3rd party teachers/tutor apps could be built on top of this using APIs*
- *Policy makers can consume data*

Default user experiences
- *Web-based for desktop/laptop usage*
- *Mobile app-based for smartphone usage, including offline capabilities*
- *Content consumption, collabration, creation, curation*
- *Multi-lingual UI*

State Portals and Apps	3rd-Party Apps

NTP Portal (Default Website)	NTP App (Default Website)

NATIONAL TEACHER PLATFORM

Video Sharing *(YouTube etc.)*	File Sharing *(DropBox, Drive)*	EkStep	....	Aadhar, Locker, UPI

Cloud, Mobile, Internet

An API-based platform
- *Build an available internet infra and Digital IndiapPlatforms*
- *Identity and community management*
- *Role and course management*
- *Various types of courses (lesson planning, professional development, subject mastery)*
- *Peer collabration and mentoring*
- *Content creation, curation and translation*
- *Teacher recognition, leaderboards*
- *Scholarships, payments*
- *Extensible by states*

Source: MHRD and NCTE 2017

solutions within and outside the classrooms. Some of the organisations include:

- Lab-in-App has developed low-cost mobile based 3-D labs for schools that are unable to invest in lab facilities.

- Curiositi approaches learning Science through engaging custom kits for students that can be used by teachers and parents.

- Math Buddy focuses on making Math interesting for children and targets low-income schools.

- Kadadi Path focuses on English language-learning for students and teachers.

- CueMath hosts visual math learning modules that include coursework, critical thinking, and problem-solving through workbooks, puzzle cards and games. Rather than relying on the usual online delivery methods, women with advanced Math and Science backgrounds are the micro-entrepreneurs in this model with a selection rate of less than 1%.

According to a startup database, Tracxn, at present, there are over 4,000 companies that are trying to solve challenges in education, often through EdTech solutions.[25] It is a highly competitive market, and only the most differentiated and impactful solutions will be able to sustain and scale. While such solutions can help improve learning and teaching quality, school leaders, as well as parents, must identify the right solutions that suit their budget and quality needs.

While there is no dearth of learning resources, teachers have been assigned textbooks that they must follow as part of the prescribed curriculum of the Central and State Boards. However, teachers do want the freedom to choose textbooks that best suit their students, especially in primary classes. Some private publishers offer books with engaging lessons that can encourage students to learn through the application of principles (as opposed to rote learning).

S. Chand Publishers looks at breaking the silos of individual smart class solutions and subject-specific textbooks to provide an overall solution for the teacher. In an interview, Gaurav Jhunjhunwala from S. Chand Publishers says, "Imagine the number of separate solutions that teachers are expected to learn to use and then teach children. It's not easy." Their solution is not just to change the books, but to integrate them with classroom teaching kits and smart solutions. Currently, over 200 schools use their solution, especially for primary classes where there is relatively higher flexibility.

Taking that concept further is Chitra Ravi at **Chrysalis (EZ Vidya)**. In an interview, Chitra Ravi shared that her first experience of the challenges in the education system were as a parent which sowed the seeds wanting to be a part of the change in schools. She first started an after-school learning centre for kids. Some of her students had learning differences and autism.

Armed with this experience, she founded Chrysalis (EZ Vidya) in 2001, a solution that goes beyond textbooks. The solutions address multitude of challenges that teachers face in engaging children to improve outcomes including early-childhood education, teacher training programs, and re-inventing textbooks to develop augmented reality enabled learning material. In 2002, she became a Wipro Applying Thought Partner. She became a facilitator and worked with over 200 teachers across 12 schools, driving teacher empowerment. The experience also expanded her understanding of Information and Communication Technology (ICT) curriculum and its challenges.

Today, over 800 schools use Chrysalis solutions. The aim is to use learning behaviour data to help teachers develop personalized learning plans for children. Chrysalis has also developed a version for BPS.

Ravi's approach places children at the centre of learning and looks at education as a way to awaken human potential. She focuses on cognitive skills, social and emotional skills, and integrates these learnings in textbooks and lesson plans. She shared a few samples with us:

Example of engaging a child through nurturing an emotional connection in a science textbook

A spinning top exhibits ___*rotation*___ (rotation/revolution).

Cars on a racetrack exhibit ___*rotation*___ (rotation/revolution).

Both rotation and revolution of Earth affect life on Earth. Let us learn more about them.

Earth's Rotation

Earth spins just like the spinning top. It spins around an imaginary line that passes through its centre. This imaginary line is called the **axis**. The spinning of Earth on its axis is called **rotation**. Earth rotates on its axis in the anticlockwise direction.

Anticlockwise rotation

Try this

Take a ball and mark a red dot to signify the North Pole. With the dot facing up, spin the ball in the anticlockwise direction.

Observe what the rotation of Earth looks like when seen from the North Pole.

Stand still for 30 seconds with your eyes closed. Concentrate. Can you feel the rotation of Earth?

Yes ✓   No ☐

Why do you think so?

___As I concentrated only on this, I felt it had a slight movement___

3.3

Example of how a child is encouraged to sense the sensations and structure of his body, helping develop health awareness

LOOK DEEP

The curves of our spine help to keep our back in its natural position. However, we still have back aches.
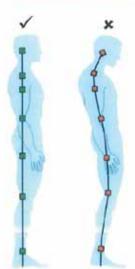
1.11

Have you ever had a back ache?

Yes

Why do you think we have back aches? (Think about what you have just learnt and answer this question.)

We get backaches because we don't give proper support to our spine which in turn gets out of position, causing pain.

Would having a back-ache affect your mood? How do you think you will act differently with a back ache?

Yes. I get annoyed easily .

✓ ✗

In order to have a healthy and active lifestyle, it is essential to be aware of how the curves of our back are affected by our movements. For example, here are indicators of a correct posture while standing:

- Our joints and bones are in their correct positions. For example, our shoulders are straight, our arms are at our sides, our knees and our ankles are pointed forward.

- Our backbone has its three normal curves, in their correct positions. The neck is upright, the upper back is straight, and the lower back is in line with the rest of the body.

Slouching our shoulders, bending our neck forward or upward, tilting our hip forward or backward, bending our knees, or pointing our ankles in different directions are indicators of bad posture while standing.

Companion

Explore the correct postures for various other everyday activities in your *Companion*.

1d

18   Up and About

Post-learning expression of a child about the experience and difficulties

JOURNAL TIME

Think and answer a few questions on the Project Time activity you just did in class.

1. Did making a model of a skeleton help me understand its shape, structure or movements better? (Yes/No). If yes, how?

yes, I could learn while doing the model.

2. Which part of the lesson did I find the most difficult to understand?

◯ Skeletal adaptations of animals

⊘ The Human Skeleton

◯ Human posture

Did I overcome my difficulty? (Yes/No). If yes, how?

My parents explained it .

3. While working on the Researcher's Quest (Activity 6c), how did I verify that the information that I gathered from various sources was correct?

I checked with my class teacher.

Teacher Competence

The variety of teacher solutions ranging from subject-specific tools to systemic support that exist today is overwhelming. However, ultimately the success of all interventions depend on the receptivity of the end-user. The following article suggests ways to one, identify existing competencies of BPS teachers, and second, encourage acquisition of new skills to help career mobility of talented teachers and also, to support parents and regulators have a better understanding of the nature of teachers.

Improving Quality of Education in Budget Private Schools through Teacher Certification: Challenges and Opportunities

Ramya Venkataraman, Anjali Jain, Rohan Joshi of Centre for Teacher Accreditation (CENTA)

Ramya Venkataraman is the Chief Executive Officer of CENTA while Anjali Jain is its Director. Rohan Joshi serves as the Program Head of the Teaching Professionals' Olympiad. CENTA is a social enterprise that aims to catalyse professional growth of teachers through its program.

Introduction

Over the last few years, BPS are being considered as an important segment within the broader K-12 education ecosystem in India. While the overall private sector share in school enrollments in India has been on the rise in the last two decades, BPS have primarily seen a significant influx of students from low-income families. Global research estimates approximately 30% share of low-fee private schools in gross enrollments is in India.[24] A wide range of investors, service providers, non-profits, and regulators have stepped forward to engage more actively with the BPS sector. The reason for engagement, of course, varies widely based on how different people see the BPS segment - as a business opportunity, as a segment that can add to education options for the poor or as a trend that needs to be managed. More recently, service providers which include publishers, teacher training entities and ed-tech companies among many others, have started developing products and services customised to meet specific needs of BPS.

Notably, despite increased engagement of different stakeholders, challenges regarding quality of education as well as scaling up of initiatives continue in BPS segment. Some of the recent studies have shown mixed findings concerning the relative quality of education in BPS and government schools. While some BPS have scaled up from single school into small local chains, large-scale chains of schools hardly exist even now.

Let us try and explore what the underlying reasons for some of these challenges could be.

Challenges of Budget Private Schools

BPS operate with a distinct business model and organisational framework. Majority of BPS operate as stand-alone entities with limited institutional support in terms of budget, managerial expertise and robust operational systems. Wafer-thin budgets and limited paying capacity of parents drive majority of the decisions within the school.

Regulatory norms that govern private schools lay significant emphasis on a variety of inputs in education such as school infrastructure, teacher qualifications, and teacher salaries. Collectively, investment in the prescribed inputs adds to the costs of opening and running schools. In this context, school administrators find it difficult, without philanthropic support, to invest in other measures that can drive quality of education.

Parents from low-income groups opt for BPS over government schools. Reasons for this preference typically are, but not restricted to: aspirational English medium education equated with 'quality education,' regular teacher presence, filled classrooms and 'better school environment' which broadly refers to infrastructure and presence of technology.[25] In light of this, scaling up initiatives designed for BPS requires service providers to work extensively on creating demand for their products. Unless there is a direct economic link, BPS are reluctant to invest in products that can directly impact the quality of education.

Over the last few years, philanthropic entities and investors, in collaboration with service providers, have initiated interventions to address some of the challenges mentioned above specifically. Some of the

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[24] Meta-study by Pearson Affordable Learning Funds

[25] Joshi and Kumar 2017

notable examples of interventions aimed at improving quality of education in BPS include: school financing entity, Varthana's 'beyond loans' program which structures loans to schools together with support for delivering quality education;[26] Indian School Finance Company (ISFC) that encourages schools to invest in infrastructure or recruitment of better qualified teachers;[27] and National Independent School Alliance (NISA) research pilot, 2016, in West Delhi, which is designed around building parental awareness on quality of different schools in the neighbourhood.

In the vast jigsaw puzzle of quality of education in India, we see 'teacher certification' playing a significant role in shaping the ecosystem, including for low-fee private schools. Broadly, CENTA aims to empower teachers and catalyse teacher professional development through its CENTA Certification that will connect outstanding teachers to great opportunities and therefore create a career pathway and tangible motivation for the broader teaching profession. This is not a training or professional development program, but an objective and practical assessment of competencies leading to Certificates of different levels. Through the catalytic effect of the CENTA Certification i.e. schools using the Certification as a signal of quality for their recruiting, promotions etc.; certified teachers getting tangible opportunities; a larger population of teachers getting tangible motivation to build competencies; high-quality teacher training entities seeing demand for their services… CENTA aims to play a fundamental role in the quality of education in India.

Why Teacher Certification?

There exists a broader consensus and plethora of research in education sector pointing that while content, pedagogy, technology and so on can contribute to the quality, a teacher in the classroom plays the most crucial role. Aligned with this is CENTA's core belief that teacher competency plays a direct role in the quality of learning. It is essential to make a shift from stating that the quality of teachers is inadequate, towards asking: How can we motivate or incentivise the teacher to improve his or her skills and delivery in the classroom? And how can improvement in the teacher's competency benefit the school?

In a 2014 survey, of about 300 new teachers and 120 senior teachers/principals, a vast majority responded that, in addition to the satisfaction of seeing their students learn and grow (which is, of course, a natural incentive for teaching), they are keen to see: (1) merit-based career opportunities; (2) financial rewards; (3) public recognition. Here, we are not talking about mandated increases in teacher salaries or just making teachers 'feel good.' A keyword here is 'merit-based.' Another keyword is 'career opportunities' indicating a long-term view rather than instant gratification.

In light of this, market-driven teacher competencies and certification can play a distinct role for each of the following stakeholders in education and contribute towards improving the overall quality of education.

1. **Teachers:** Given the lack of qualified teachers in many of the low-fee private schools, a set of 'Standards' or 'Competency Framework' becomes all the more important to define what skills the teachers need to bring either as incoming capacity or aspire to build while in service. This competency framework can become an integral part of recruitment, training, and retention of teaching talent.

   Separately, certification based on competency framework which is also accepted widely by other parts of the ecosystem e.g. middle rung or high-end private schools, or government schools as well as education service providers such as training entities, publishers and so on, becomes a mechanism for teachers to get career mobility. Direct connection with a range of career opportunities can facilitate entry of certified, high-quality teachers into low-fee private schools at the early stages of their teaching careers.

2. **Schools and school administrators:** Need for teacher certification directly benefitting schools cannot be emphasised more. For BPS, certification can immediately benefit in at least two distinct ways. First, school owners can start using the certification as a tangible metric and a differentiator from competitor schools to compete in the market. It is also likely to influence parental choice and aid the selection of the right school for their children.

   Second, the majority of BPS' operate with lean organisational structure and optimised teacher capacity i.e., there is no excess staffing, and teachers often teach multiple grades and subjects, especially at primary school level. Modularised teacher certificates can help school owners to identify as well as nurture in-house specialists in specific areas such as Subject Expertise, Content Development, Classroom

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[26] http://varthana.com/beyond-loans/

[27] Windlass 2017

Communication. Availability of this 'basic expertise' in-house can help school owners to optimise expenditure on acquiring such expertise from outside potentially.

3. **Parents:** Understanding teacher quality and using it as a basis for school selection can play a pivotal role in creating a consumer-side push for quality of education. Given the consumer demographic of BPS, it can be particularly difficult for parents to understand teacher quality. With increased parental awareness, certification can become a simple mechanism to help parents to have a view of teacher and school quality.

4. **Regulators:** Regulators face the dilemma of setting a benchmark for quality of education that can be applied across the schooling segments. As the share of private schools grows, the need for establishing a suitable regulatory approach becomes increasingly important. Regulators need to distinguish schools that are relatively better than others. Certified teachers can be a leading metric in forming an informed view to create a policy paradigm for the education sector.

5. **Funders and investors:** Most charitable organisations and investors engage with BPS to realise the goal of making quality education accessible to all children. As investments in market-driven solutions to enable quality education increase, teacher certification can serve as an important tool to build incentives as well as accountability around investment in BPS.

6. **Service and product providers:** There is an increased movement to develop customised teaching solutions for children from low-income families. High-quality teachers from BPS, being in a direct relationship with the children, can provide critical inputs for the production of goods and services relevant to the segment. In turn, service-providers can become part-time employers of talented teachers from BPS. Certification can play an essential role in signaling - identification of quality teachers and connecting them with opportunities as the market develops.

Can Teacher Certification Work for Budget Private Schools?

While certification can play a significant role in the development of ecosystem and creation of a market space connecting talented teachers with opportunities, there are a few bottlenecks to teacher certification in BPS segment. Following are the three critical bottlenecks:

1. **Clear career paths for certified teachers:** With a majority of the schools operating as stand-alone entities, there is limited scope for career growth for teachers within a school. Regarding rewards and incentives including promotions, schools in this segment have financial and organisational limitations such as budget constraints.

2. **Ability to pay for certification:** Teachers' ability to invest in certification can become a bottleneck particularly in the context of average salary levels in BPS segment. In the middle- to high-fee schools, as well as government schools, institutional support can help teachers to pay for certification.

3. **Ability to clear certification:** CENTA Certification is derived from competency framework for the teaching profession. Standards and competencies for various levels of teachers and areas of expertise are a combination of existing benchmarks for professional excellence and what is expected of professionals in the sector globally. The objective and practical assessments which lead to the certification draw heavily from such parameters creating challenges for teachers in this space to qualify.

Based on CENTA's experience of last three years, following are the suggested ways to resolve the challenges mentioned above:

1. **Opportunities and rewards:** Teaching Professionals' Olympiad (TPO), a part of CENTA certification, is conducted annually as an objective, computer-based and national-level competition for teachers. Several renowned commercial and nonprofit entities have supported TPO over the last three years, essentially to recognise and reward meritorious teachers. A community of 30,000 teachers from 800+ villages, towns, cities across India and UAE makes TPO a successful initiative for excellence driven teachers to test their skills and reward their performance.

   Teachers from BPS have enthusiastically participated in all three editions of TPO. Consistently, 8-10% of TPO participants have been from BPS. Recognising the fact that opportunities for meritorious teachers from BPS who perform well in TPO might not exist within their schools and the segment at large, CENTA has created several winner categories and prizes specific to them. These include some immediate rewards such as cash prizes, professional development opportunities, global recognition as well as some system-level opportunities such as preferences in recruitment.

CENTA certification can be availed as a whole or for independent modules, creating flexibility and options for certified teachers within the school and with service providers.

2. **Payments:** Teachers from BPS receive support from philanthropic organisations and foundations such as through scholarships.

3. **Ability to clear:** TPO participation and performance trends over the last two years present an encouraging view of teachers from BPS. As mentioned above, 8-10% of participants come from BPS. A majority of these teachers pay to participate in TPO.

Although high-fee schools had a significant share in the top 100 ranks in 2015 and 2016 edition of TPO, a sizeable number of top 100 performers were from BPS. In 2016, 9% of all teachers who participated were from schools that charge a fee less than Rs 1500 per month and had a share of 8% in Top 100 performers. BPS teachers show somewhat lower performance than high-fee schools, but the difference is not significant in most sections of the test.

Concerning specific competencies, in TPO 2015 and 2016, BPS perform worse than other schools in 'Classroom Communication'. Broad findings suggest that though low-fee schools face challenges regarding infrastructure and talent, it is possible for such schools to have teachers with strong competencies and teacher development can play an essential role in building this further.

To encourage talented teachers from BPS and to motivate others to set themselves on the path of career development through TPO and modular certification, CENTA has initiated building partnerships with organisations that support teachers in acquiring competencies required to clear assessments for CENTA Certification.

Personalised Assessment

The section, so far, has explored two aspects of quality improvement—content-related tools and teachers. Once the right curriculum and competent teachers are in place, the question that follows is of the assessment. To understand perceptions of Continuous and Comprehensive Evaluation (CCE), a Chrysalis (in partnership with Wipro Applying Thought) 2015 survey of 123 schools reflects the faculty perception of assessment in India today. The study concluded that many teachers view assessments as 'stock-taking' instead of a method to identify loopholes in teaching or to understand student's strength and weaknesses.[28]

Figure 9: Purpose of Assessment from a survey of 625 teachers from 123 schools

60%	**28%**	**6%**	**4%**	**1%**
To understand the effectiveness of student's learning	To study the overall development of students	To assess the strength and weakness of students	To understand the effectiveness of teaching	To understand if teaching methods have to be altered

Source: Ravi 2015

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[28] *Ravi 2015*

Such perceptions make us ask: What is the purpose of assessment? What is the appropriate method to assess? What are the remedial measures a teacher should take post assessment? These are some of the questions answered in the following interviews with two innovators who have thought carefully about these questions and built solutions such as Mindspark and IMAX.

Mindspark: Driving Improved Learning Outcomes

Based on an interview with Pranav Kothari, Vice President, Educational Initiatives

Educational Initiatives was founded by Sridhar Rajagopalan, Venkat Krishna N. and Sudhir Ghodke in Ahmedabad in 2001. Armed with a Masters in Business Administration, the founders set up a K-12 private English-medium school, Ekalavya, for comprehensive development in academics, sports, arts and music. Their dream was not just to educate but to help each child discover a sense of purpose. Over 1,300 students and 100 teachers joined their vision in their 35-acre campus.
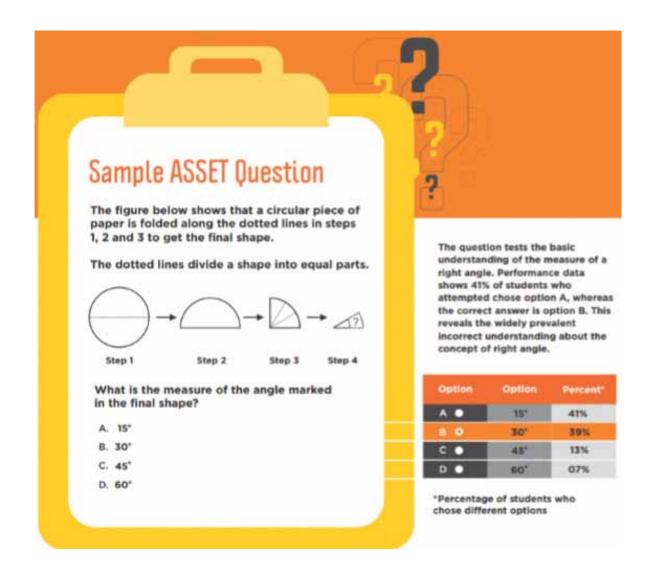
Over the years, they felt that the effort was not enough. The question that they had was how they could bring change to more people. Personalised learning was an answer they were looking for. With this thought, they founded Assessment of Scholastic Skills through Educational Testing (ASSET). Over 350,000 students across 3,000 schools have participated in the ASSET tests since. The GyanShala schools and the Muni School have recognised ASSET as a learning outcome tracker.

Sample ASSET Question

The figure below shows that a circular piece of paper is folded along the dotted lines in steps 1, 2 and 3 to get the final shape.

The dotted lines divide a shape into equal parts.

Step 1   Step 2   Step 3   Step 4

What is the measure of the angle marked in the final shape?

A. 15°
B. 30°
C. 45°
D. 60°

The question tests the basic understanding of the measure of a right angle. Performance data shows 41% of students who attempted chose option A, whereas the correct answer is option B. This reveals the widely prevalent incorrect understanding about the concept of right angle.

Option	Option	Percent*
A ●	15°	41%
B ○	30°	39%
C ●	45°	13%
D ●	60°	07%

*Percentage of students who chose different options

In 2008, using the data collected from the assessments, Mindspark was developed. It is a computer-based adaptive learning program that uses graded questions and adaptive language to help students understand Math and language. In 2014, an offline version was created to reach more students.

Mindspark customises learning by basing it on the students' current level of knowledge, the pace at which they can learn and their style of learning. It also takes into account the prevailing misconceptions students might have about the topics. With a focus on ease of learning, they also offer the available content in the Hindi language.

Introduction of animal footprints in a Mindspark class

Mindspark also encourages learning-by-doing instead of the conventional text-based learning. The program also helps children learn through instruction, regular quizzes at a granular level, and solutions based on remedial feedback.

Mindspark Math remedial feedback to understand where children are going wrong

Mindspark designates its classrooms as 'labs' equipped with 40-60 computers. Each class can have four Mindspark periods of 30 minutes each per week per child. The centre also caters to students who are unable to attend school regularly. The focus is on a blend of

education through a teacher and personalised learning program on a computer.

Apart from an in-school model, they also cater to out-of-school students in BPS in South Delhi. The school works in a single shift from 8 AM to 1 PM post which, they set up a timetable that can cater to over 400 students. It helps in capacity building at a price of USD 30 per year per child. While the Table 4 elaborates on the different models of Mindspark, the 'out-of-school' model could be a viable option for BPS and can help drive personalised learning outcomes.

The initial pilot projects had encouraging results with over 10% improvement in Hindi levels over a four-month intervention period. Reading saw over 21% gain in four months for a sample Class 2 lab. The pilot labs in low-income neighbourhoods also serve out-of-school children, allowing them to learn at their place and in their pace.

Mindspark team found teachers wanting solution for other subjects like Science, Math and English. A critical insight is that many students were interested in reading the modules. Some children loved listening to stories in the Mindspark Bhasha modules. Moreover, a few inspired students have started writing diary entries about themselves and sometimes creating their own stories.

The data in the analysis interface of Mindspark provides information at both granular and aggregate levels. For instance, let's take an example of a student named Anita, a Class 5 student. One can analyse just how long she used Mindspark (172.3 minutes). One can also check her scores (52% in grammar) and her effort (attempted 155 questions and got 137 (88.4%) of them right). Not just that, Mindspark helps assess how long that took (on an average she took 55.06 seconds to answer a question). Apart from the individualised assessment indicators, they also have a 'common wrong answers' report to highlight areas that many children struggle with. Teachers particularly find the 'common wrong answers' report extremely useful and take it back to their classrooms to bring in change before the next assessment cycle starts.

Through their assessment methods, Mindspark has set itself apart from a standard Edtech solution by bringing a focus on learning outcome rather than just distributing content.

Moreover, the fact that even out of school or children in their neighbourhood can join the classes makes the system possible to adopt for a BPS school with an intent to build both capacity and learning outcomes.

Table 4: Mindspark operation models

Mindspark Centres inside schools	Independent Centres outside the schools	Hybrid Model
Facilitators will include school teachers.	Facilitators will be external staff.	Facilitators will be a combination of school teachers and external staff.
Children are allotted Mindspark sessions in the school timetable.	Children choose which time to come to the centre after school hours.	All the school kids will get access to MS during class hours. Children who go to nearby schools will get access to the lab after school hours.
The lab will be closed during holidays/exam times *although this can be kept open with the help of contract staff (if the government so desires).*	The centres will be on all days except Sundays and national holidays.	Access to Mindspark during school hours will be limited to the school working days. The after school sessions can be open all days except Sundays and national holidays.
Integration with schools allows teachers to develop their skills for teaching and understand their children's level better.	The staff will get to closely interact with the children and the parents and understand their needs.	The external staff can help with the capacity building of teachers during school hours while they can interact with children and parents in the after school sessions.
All children within the school get access to Mindspark.	Children from any school (private or government) can access the centre.	All children in the school gets access to Mindspark during school hours while children of any nearby school can get access to the MS sessions after school hours.
Teachers can use the data to plan their lessons.	Reports can be provided to the relevant teachers and parents.	Teachers of the school will get access to the data about their children while the after school sessions will allow the staff to share reports with the parents also.

Source: Kothari 2016

IMAX Program: Personalised Learning at Scale

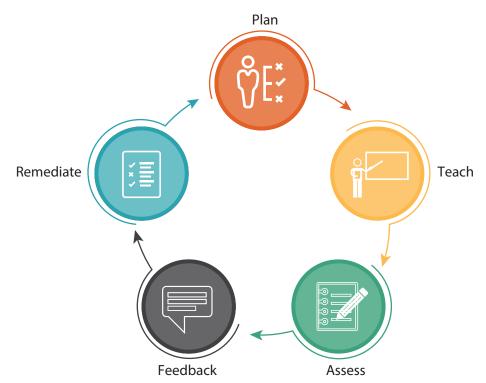### Based on an interview with Naveen Mandava and Varun Kumar, Co-Founders, IMAX

Before creating the IMAX Program, Naveen Mandava was working as a doctoral fellow in Public Policy Analysis from Pardee RAND Graduate School in Santa Monica while Varun Kumar, having graduated from the Indian Institute of Technology Kharagpur was working for ITC Limited. They wanted to do more, and were driven towards achieving a higher purpose and their chosen field was education.

The founders observed that while many learning solutions were aimed at assessing students, a few of these solutions (NTP, Meghshala as profiled earlier) provided resources for teachers, and even fewer solutions helped teachers make a substantive impact through remedial feedback. From 2009 to 2012, they worked as Education Impact Evaluators working with several national and international organisations completing over 100,000 assessments. This was also the time that they worked on understanding the real challenges.

The founders argue that the future of education in India is in personalising learning for students and harnessing data on learning to build resources for the same. They also reason that improving the performance of students is a challenge that needs to be solved, at scale, within the existing assessment system.

IMAX Learning Framework

Plan

Teach

Assess

Feedback

Remediate

Schools in India conduct about six internal assessments in each academic year, and all the stakeholders involved have incentives to align. School assessments take up large academic and administrative capacities of the faculty and the management. Teachers and students usually do not have any incentive to perform additional assessments conducted by external agencies.

They focused on saving a teachers' time from non-core activities so that they could spend more time on teaching in the classrooms. Many of the current solutions are focused on improving learning quality for a specific subject through a textbook or a smart solution. This leaves the teacher with the challenge of thinking through and integrating everything across multiple platforms, systems and processes. The IMAX Program addresses these challenges by engaging with the current system of assessment. Table 3 presents few examples of questions from their modules.

Their journey had many steps. They started with designing their own books and setting question papers for students free from teacher's bias of 'important questions'. Based on the teacher score on the tests, they developed individual remedial feedback for each child three times a year. The first pilot was in a 30-schools-chain in Hyderabad. They conducted three assessments of 6,000 students across three subjects—English, Mathematics and Science. Naysayers said it would be impossible to assess essay type answers at scale. A team of 120 teachers evaluated 18,000 answer-scripts in under four hours with three rounds of quality checks. XamCheck was born.

In his blog, co-founder Naveen discusses the proposed solutions at length and observes, "Teaching is a significant but a limited role which teachers play and even that is done like clockwork; the syllabus should be covered, workbooks should be completed and everything evaluated. We realised that you cannot simply plug a standalone or piecemeal solution into the school system. Integration with existing behaviour and practices is the most important factor contributing to the success of any product in the school market."[29]
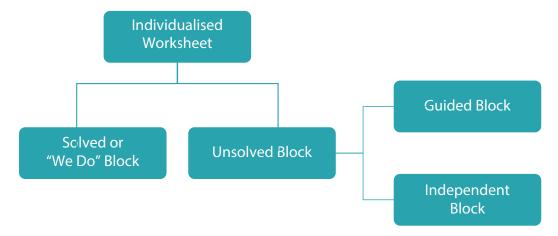
The firm has a presence in over 800 schools today through a 'whole product' approach that takes complete ownership of the learning process: 'Digital Content - Text Book - Resource Material - Personalized Practice Material - Assessments - Personalized Remedial Material - Extracurricular Activities - Report Card - Teaching Support Material'.

Table 5: IMAX questions

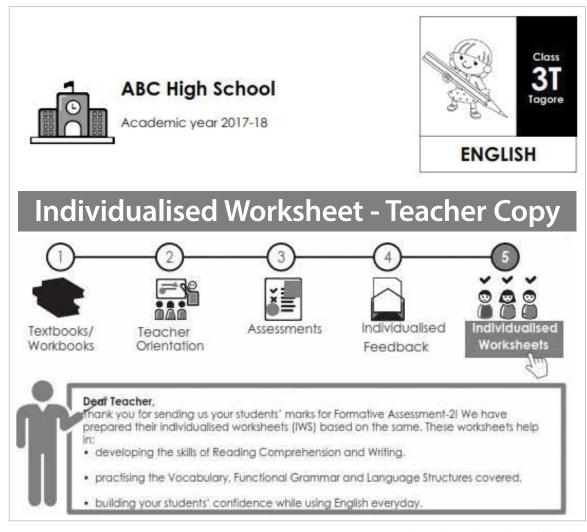| Question	IMAX Style
Write a short note on Razia Sultan	When Razia Sultan ascended the throne in 1236 AD, she faced a lot of opposition from the male nobles in her kingdom. Do you think the same happens with women leaders today?
What are the benefits of the Himalayas to India?	If the Himalayas were on the coast of Kerala, how would India's geographical features be different?
Ravi had 63 oranges. He gave 27 to Sushma and 19 to Sunitha. How many oranges were left with Ravi?	Create a word problem with the digits 63, 27 and 19 using the operations of addition and subtraction.
Write the missing lines in the given poem Twinkle, twinkle, _____, _____ what you are! Up above the _____, Like _____ in the sky.	Read the below poem, and write the next stanza in your own words. Twinkle, twinkle, little star, How I wonder what you are! Up above the world so high Like a diamond in the sky.

[29] Mandava 2015

IMAX remedial worksheet process

The key difference in their solution is how they personalise the remedial feedback for each child. The individualised worksheets have separate teacher and student copies. The teacher's copy provides the class average on critical concepts and a daily remedial plan for each child. Apart from solved questions, they have individualised practice questions with answer keys, support videos and a class improvement log. It also helps the teacher to group the students for group activities through a data-based understanding of their individual learning levels instead of a random grouping. This helps in peer to peer learning and betters the overall class performance in a scalable way.

IMAX remedial sheet: Teacher's copy

IMAX remedial sheet: Student's copy

Arjun krishna

I MAX UUID : TWTQR0969M

ABC High School

Academic year 2017-18

Class **3T** Tagore
Roll no. **1**

MATHS

My Individualised Worksheet

✔ **Complete** by yourself

➤ **Help** your friends

🏃 **Compete** as a team

Performance in Critical Concepts:

The following concepts are chosen from your Term Assessment 1 syllabus based on their importance for conceptual learning now and in future.

83% Add 3-Digit Numbers with Regrouping and 4-Digit Numbers Without and with Regrouping

83% Subtract 3-Digit Numbers with Regrouping and 4-Digit Numbers Without and with Regrouping

100% Multiply 3-Digit Numbers by 2-Digit Numbers (Including 10) and 100

33% Division as Equal Grouping

20% Represent Fractions by Shading a Part of a Shape

Student's performance % in critical concepts

Every student gets a We Do block and a personalised block (guided/indepdent based on the performance) for every concept

My Improvement Log:

My confidence in these concepts has improved. Tick if you agree.

☐ Add 3-Digit Numbers with Regrouping and 4-Digit Numbers Without and with Regrouping

☐ Subtract 3-Digit Numbers with Regrouping and 4-Digit Numbers Without and with Regrouping

☐ Multiply 3-Digit Numbers by 2-Digit Numbers (Including 10) and 100

☐ Division as Equal Grouping

☐ Represent Fractions by Shading a Part of a Shape

An opportunity for students to reflect on their improvement in the topics after working on PWS and tick the concepts where their confidence has increased

Steps:

1. Work on the topic asked by teacher.
2. Understand topic from the solved problem.
3. Complete your work before helping others. Helping means explaining.
4. Compete together as a team.

The student's copy details practice questions for various learning levels and also helps students in teamwork and peer-learning according their strengths. Students regularly update their reflection logs and this helps in tracking their learning.

The IMAX model is based on the reasoning that no two students are the same, and that teachers cannot be expected to integrate multiple disparate solutions on their own.

For low-fee schools that cannot afford to have a central level focus on quality planning, IMAX Xamcheck could operate as an academic service partner and through the individualised remedial steps for each student, the program can help teachers improve learning outcomes in a systematic and scalable way.

Whole School Transformation: Mantra4Change

Based on an interview with
Santosh More, Co-founder, Mantra4Change

Santosh More and Khushboo Avasthi, co-founders of Mantra4Change, embarked on their journey by teaching at community classes after school. Santosh was part of the first cohort of Teach for India and Khushboo graduated from Tata Institute of Social Sciences, both with a goal to make a difference in the education landscape in India.

To this end, their first project was with My School in Shantinagar where they implemented their concept of whole school transformation in 2013.

Schools are complex organisations with multiple stakeholders and structures. Their theory of change spans over multiple levels from belief, action change to school leadership. With this understanding, they created the 'Outcomes Chain' with eleven different characteristics for effective school practices, improved student outcomes and evaluation of teacher performance.

To make this change sustainable, the Mantra team focused on not just the beliefs of the school leader but also on the systems and process of the management, and on behaviour, skills and practices. Their aim was

to build a self-sustaining model of transformation such that within two-three years, the process would be ingrained in the school system and they would no longer need to intervene.
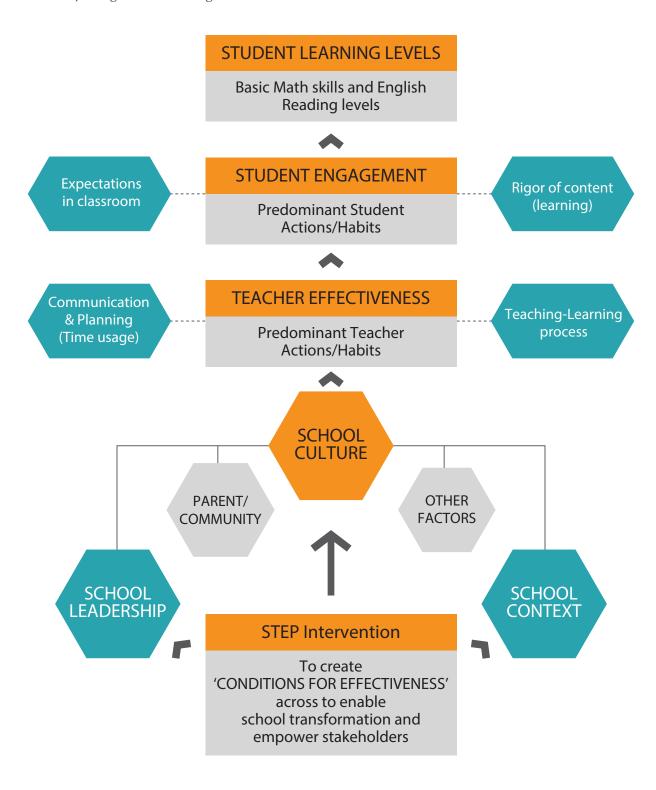
The program's second pilot project was with a government school in Goripalya. However, they soon realised that the model of change they had applied on the private school cannot be applied on a government school. Multiple stakeholders from Block Education Officer, Cluster Officer and municipal bodies needed to be involved in transformation of these schools (as compared to BPS where the school leaders hold the decision-making power). To initiate change here, the program was executed in 'clusters'.

Over a two-year span, Mantra4Change has initiated 40 school transformation projects across BPS and government schools. A few learnings that stand out are:

- **The belief of the school leader was fundamental in the change process:** successful leaders created a strong base and drove a second tier of school leaders to catalyse change.

- **Active participation by teachers:** Once the initial workshops were done, the teachers became involved in the process. They started to meet every week as a professional learning community to find solutions among themselves

- **A deep commitment in teachers in rural areas** as they were passionate about the betterment of children from their own community.

These learnings have now resulted in a program called 'EdMentum' incubating organisations for whole school transformation. For instance, for instruction, they sometimes use local material such as broomsticks to demonstrate Math learning concepts. Such simple, practical and creative teaching ideas inspire teachers to develop their own solutions.

To ensure their services are affordable, especially for low-fee schools, they charge participating schools the salary of one teacher. Could more BPS schools find value in such a systematic look at transformation that empowers teachers and enhances the school culture? Such an approach can present an alternative for sustained improvement of the quality of schools.

Mantra4Change levels of change and transformation

STUDENT LEARNING LEVELS

Basic Math skills and English Reading levels

Expectations in classroom

STUDENT ENGAGEMENT

Predominant Student Actions/Habits

Rigor of content (learning)

Communication & Planning (Time usage)

TEACHER EFFECTIVENESS

Predominant Teacher Actions/Habits

Teaching-Learning process

SCHOOL CULTURE

PARENT/ COMMUNITY

OTHER FACTORS

SCHOOL LEADERSHIP

SCHOOL CONTEXT

STEP Intervention

To create 'CONDITIONS FOR EFFECTIVENESS' across to enable school transformation and empower stakeholders

A TEACHER'S STORY

" "Imagine you are up early. You are looking outside your window. A bird looks back at you. It is the colour of the night sky, and it can't sing. Its voice sounds harsh, like it has a bad cold. Tell me which bird is looking at you?"

It's a class on Environmental Science. The topic is birds. And before my children start to open their books and start learning about the different types of birds, I need to make them picture the birds they would have seen, around them.

It works. I don't need to teach them about birds. They start telling me about birds they have seen. It's the joy of seeing an engaged class that every teacher dreams of. That's what teaching gives me. But teaching wasn't always that easy for me.

I was born in Bengaluru and brought up in Mysore. I studied in a convent school that was close to my home. School life was a happy time for me. I loved playing throwball and volleyball. It was a co-educational school with all the facilities we needed to study and play. My teachers were good. After Class 10, I took a diploma course in Computer Science.

You can guess the part that comes next. I got married. I didn't work for a few years.

I kept thinking that I was well-educated, I should be doing something worthwhile with my life. I was not a trained teacher. But joining Shastry Memorial School brought me closer to myself. I realised

that my happiness was in teaching. The first few years were tough. I did not have experience in managing a classroom of high-energy students. Should I be strict with them? Should I be friendly? Should I appreciate them or reprimand them for their mistakes? I tried different approaches to figure out my own teaching style. It took me two years.

What I realized is that I needed to keep learning if I wanted to keep teaching my students. After 5 years, I completed my BA degree and got my second degree.

Being a teacher is not easy. We are not just expected to teach but do so many other things from setting papers to assessing students and from motivating them to helping them reach their potential.

What worried me most were the children who were falling behind in class because I was not able to help them individually. And no one was solving that problem for us.

We had multiple solutions that helped us get access to knowledge, more learning resources and the like. The challenge I personally faced was helping each child, in a classroom environment.

I saw the difference most clearly when I asked a question. Some children would raise their hands, eager to answer. Others would bend their heads bent down, furiously scribbling away something, hoping I would not ask them to answer the question. And if we teachers focused only on the active, engaged children,

not only would some children get left behind, we would also be seen as partial teachers. That bothered me a lot.

I started adopting the IMAX program from the middle of 2017. I had many questions in the beginning around how to correct questions and how to set homework.

Over time, I found an answer to my question. I am able to concentrate individually on each and every child now with the remedial sheets that focus on every child's unique learning method.

Take Manjunath and Rebecca - Class 4 students of my school. They were among those students who had their heads bent earlier. Now, I found them answering without fear. And I found a change in my own teaching. Without realising it, I was probably spoon-feeding children a bit earlier. Helping them study based on questions they would face in the exams.

Now, I make the children read the questions and think through possible answers. And the ones who are good, help the others. I don't need to dictate each answer. And they are engaged.

I have signed up for the D. El. Ed. certification now, as mandated, and hope to learn more about child psychology and the new teaching methods that can help me help my students more.

Personally, I find children are often burdened with too much studies nowadays. I would love to see them play more, the way I enjoyed playing while growing up.

Studies are important for them, but I believe as a teacher, my greatest gift to them is to help their imaginations fly, even when I am not teaching them about birds.

- Deepashree, Teacher,
Shastry Memorial School, Bengaluru

2.2
Blueprint for Change

Section one discussed the classification of BPS as well as the emerging 'models of excellence' in education in India within this category. Consequently, Section 2 discussed learning resources, teaching material, personalized assessments and whole school transformation, as methods that low-fee schools can adopt according to their circumstance to tackle the challenge of learning outcomes and quality education.

Interviewed on education quality, Sujatha Rao, Educationist and Co-founder, Viridus, said, "Quality is anyway an extraordinarily difficult theme to understand in Education. People's idea of education is different. For some, it's standardized assessment. For some, it's education that benefits the community. The real marker is to be able to show if every child is growing consistently."

Often, readily visible markers such as use of technology, good infrastructure, assessment results are employed to assess the quality of education in schools. However, the more tacit indicators of quality are reflected in the shared values of the school, in its culture, the structures and processes that support the institution. To truly understand parameters in quality, a wider, and more inclusive discourse needs to be developed that engages innovators within this field.

Despite the apparent need for solutions to improve quality in BPS, selecting the right resources from the plethora available is tricky. To select the 'right' tools, schools must first identify their challenges, and the capacity they have to address these limitations. The research by FSG elucidates the current mechanism of selecting interventions. The BPS owners currently rely on information provided by solution providers or received through word-of-mouth from other schools. Needs assessment is mostly driven externally—either by regulation or solution providers. Given the current command-and-control approach of regulation in the country, there is a dire need for an independent needs assessment that helps identify school existing challenges and suggests ways of improvement.

Kulbhushan Sharma, President of the National Independent Schools Alliance (NISA), is working towards addressing the common challenges that BPS face, by employing scalable solutions for quality improvement. The objective is to ensure that these solutions are affordable for individual schools as well as 'cluster' schools. By forming clusters, schools are able to reduce the cost per school while providing sizeable customers to service providers. For instance, in June 2017, NISA partnered with Microsoft to host the NISA Thought Leaders Summit in Bengaluru with participation from over 140 school owners from 15 states, and ed-tech experts from Microsoft. The conference led to a dialogue on the scope of technology in building cost-effective innovations for BPS. Following the summit, NISA has now partnered with Microsoft to bring its Microsoft Aspire School Program (MASP Pro) to NISA's 55,000 school network.

NISA has also partnered with Gray Matters Capital (GMC) to build a 'quality charter' to be adopted by its member schools and association to better learning outcomes. The charter aims to aid schools in identifying their challenges and self-selecting solutions for the needed change. Once the discourse is shifted from better infrastructure to sustainable interventions in low-fee schools, it is possible to foster quality enhancement and create a system that is accomodating of the diversity of schools and is personalised for each student. In the following article, Smita Sircar of GMC, suggests systemic means to empower schools and students, and to improve learning outcomes.

Table 6: Existing process of selecting appropriate solutions

Steps	Factors
Needs Assessment - Common Drivers	• Mostly driven externally either through solution providers or in some cases, regulators. • Sometimes, driven through observing other schools. • Rarely, internally or practively to resolve existing challenges.
Information Gathering	• Heavy reliance on external solution providers. • Sometimes, through existing schools in the network. • Least likely sources include magazines, internet or industry platforms.
Evaluation basis	• Affordability. • Alignment with financial or non-financial motivation of owners. • Ease of integrating a solution in the existing system. • Clarity of detail provided to the school about the requirement from the school.
Decision making	• Owner is key decision maker, whereas the principal is consulted and informed. • Teachers might advice but they are informed and expected to implement. • Parents are informed and may raise concerns.
Post-purchase behavior	• No tracking of results achieved but effectiveness judged mostly through parental perception.

Source: FSG 2017

Cracking the Code: Rethink, Reframe and Act!

Smita Sircar, Innovation Director, Gray Matters Capital

GMC is an Atlanta based impact investor with a mission to support "An education leading to a more purposeful life for 100 million women by 2036." In India, it invests in for-profit education ventures with a focus on access to affordable quality education and on employability leading to a future job ready workforce with 21st century skills. Investments in education focused funds; enterprises with break through solutions in education with its edLABS initiative; building markets through ecosystem development and providing value beyond capital through portfolio management constitute the key focus areas of its India strategy.

A Global and Local Challenge

Education faces two key challenges: a learning outcomes gap and an ever-widening future employability gap. In fact, the former feeds into the latter.

Reports from United Nations and World Bank state that more than 260 million children worldwide are out of school, and half of those in school are not learning.[30] Six out of 10 children and teenagers in the world are failing to reach basic levels of proficiency in learning.[31] Globally the push to ensure free primary and secondary education by 2030 has helped push enrollment numbers up but there has been a 'trade-off of quality for quantity.'

In India, too, we are facing the same challenges. As per U-DISE 2016, we have achieved near-universal enrollment in elementary schools (Class I-VIII), but many children lack foundational skills.[32] The Annual Status of Education Report (ASER) 2016 observed that 27% of children in Std VIII were unable to read a Std II level text. Almost 57% were unable to solve a 3-digit by 1-digit division sum.[33]

[30] UNESCO 2017

[31] UNESCO UIS 2017

[32] National University of Educational Planning and Administration 2015-16

[33] Annual Status of Education Report Rural (2016) 2017

The findings of ASER 2017, highlight the need for India's education system to do a serious and immediate rethinking on equipping our 14 to 18 year olds with knowledge, skills and opportunities for the 21st century world as they reach adulthood.[34]

Schooling without learning is a terrible waste of precious resources and of human potential. The low levels of learning outcomes indicate the systemic issues in the way education is imparted.

Add to this the threat posed by hyper automation and the rise of Artificial Intelligence that could wipe out the jobs which exist today. McKinsey has estimated that due to base level automation from 2016-30, about 400 million jobs will be displaced globally and of this 60 million would be in India.[35] Reports by industry bodies such as FICCI and NASSCOM have postulated that almost 9 percent of the workforce in the future would be deployed in new jobs that do not exist today and nearly 40 percent of Indian workforce would be in jobs demanding radically different skill sets.[36]

Reality Check: Zero Dissatisfaction into a Crisis

Given the low level of learning outcomes and future disruptions in employability, are students, parents, teachers and schools demanding a system level change? These direct stakeholders seem to have accepted the status quo.

Across all socioeconomic strata, children in Indian schools go through immense stress to score high marks for getting admissions into colleges. College is important for students and parents because it is a path to that dream job or at least a survival job.

This continues to take their focus away from what is important in the future i.e. building 21st century life skills such as creativity, critical thinking, collaboration, grit and problem solving along with inculcating in them leadership and entrepreneurial skills - the essence of quality education. These 21st century skills unlike marks, are intangible and difficult to measure; while they greatly impact an individual's chances for success, they have to be embedded in the education process of a child.

No wonder then, most direct stakeholders are focused on achieving the direct tangible academic proficiency goal

that is rewarded by the system today. Parents are working hard to send their wards to the best school, teachers are busy teaching to improve academic proficiency and students are busy studying at school as well as tuitions. Hence, on the demand side there is "Zero Dissatisfaction" on actual quality of education imparted and its long-term effectiveness. This effort to keep up with the system is making most direct stakeholders myopic. We have to be empathetic to why the direct stakeholders have accepted the status quo and are consumed in their pursuit for marks alone. The risk is that achieving just marks will not be sufficient for the child to be empowered for future success.

Thus, though there is absolute need for large scale change, what is observed is that there is "Zero Dissatisfaction" in the system, leading to the lack of demand for quality education from students, parents, teachers and schools.

Cracking the Code

Are we then at an impasse? If so, how can we move the system forward?

It is apparent that we need to crack the code towards meaningful change and build an education system that empowers a child with skills and belief to thrive in the future.

With more than half of India's population being below the age of 26 and an estimated 250 million people entering the workforce by 2030, cracking the code is needed for India's much awaited 'demographic dividend' to materialize.[37]

We need to Rethink, Reframe and Act to crack the code. The rest of the article gives pointers to rethink our base objectives, reframe to empower and inspire the innovators and doers to act on changes that will tip the system forward.

Rethink: The Big Question and the Core Objective

As elucidated above, the future changes in workforce will be exponential and we are all heading into an era of lifelong learning. The big question to rethink and find answers to is the true purpose of education and its relevance in empowering a child to be future ready.

The current system expects a child to be on a treadmill to

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[34] Annual Status of Education Report Rural (2017) - Beyond Basics 2018

[35] Manyika, et al. 2017

[36]   Future of jobs in India: A 2022 perspective 2017

[37] Thomson Reuters 2016

achieve marks as a passport to a future dream job. This has hindered schools in their quest to impart all round quality education. However, if those jobs are not present in the future or require skills that are radically different, we need to pause and reflect on whether it still pays to be myopic.

If not, then the emphasis would need to shift from most of the stakeholders parochially hankering after the yardstick of marks, reducing education to a hyper competitive rat race to a self-learning exploration that facilitates a student's quest for identifying his or her true potential. We would have to move from the current education model that works in the form of an assembly line manufacturing unit and supports the 3 R's (Rote Learning, Writing and Arithmetic) into a congenial environment for self-learning where a child discovers purpose and is encouraged to pick up 21st century skills and habits that will enable her to thrive in an ever changing and complex future world.

Imbibing practical and obsolescence proof skill sets is the need of the hour. This is where self-directed learning needs to kick in and education system's contribution to entrench it as a lifelong habit to insulate careers gets underlined. This will improve the prospects of every child being well positioned to self-earn in the future, either by joining the workforce or turning entrepreneurial.

It is, thus, evident that the education system has to transcend into a "Self-Learning to Self-Earning" model which is more self-sustainable from a future of jobs point of view.

This seems like a tall order if we want a top down solution. However, given the diversity and heterogeneity of our country, it seems unlikely we will find a one-size-fits all solution. Therefore, the system should enable multiple workable solutions to emerge that are relevant to the socio-economic context of different regions. It should empower innovators across the system to find their micro-solutions, that will combine at a system level to achieve our mutually beneficial end objectives.

Reframe:
To Empower the Innovators

Let us reframe to look at not what divides us but what unites us in our quest to enable learning of the child to thrive in future and support all innovation towards that.

India has innovators present across the system; be it teachers and academicians who are experimenting with pedagogic styles; school leaders who are taking the lead to transform their schools; parents who are encouraging their wards to explore multiple sources of knowledge;

entrepreneurs who are introducing breakthrough ed-tech solutions or policy makers who are receptive to innovation in the education system.

It is easy to classify the stakeholders as government, not-for-profit or for-profit organizations that serve the education sector in the country. We could also classify on basis of funding to support the sector; be it government, international organizations, foundations, philanthropists, CSR funding and impact investors. Lastly, we could define on specific roles in the system – played by teachers, students, parents, school leaders, entrepreneurs or policy implementers.

Instead, we should reframe on the basis of innovation and redefine ourselves as innovators and doers within the system that are building or enabling workable solutions towards our common objective.

The need is for collaborating on vision and moving beyond ideological stands and behavioural biases to achieve affordable quality education for all. Let us focus on finding workable solutions that deliver disproportionate value in terms of cost, quality, engagement, ease of adoption & distribution and empathy towards all especially the students, teachers and parents.

Cracking the code will require innovation at all levels, synergizing efforts of every stakeholder and incentivizing behaviours that are aligned to the end objective.

For example, both government and BPS have a role to improve access and impart quality education. Private schools which account for 23% of Indian elementary schools and over 35% of total enrolled students can play an important role to play in galvanizing the system to make it a race to the top to provide quality education.[38] Therefore, the school that will ultimately enable such learning is private, public institution or a combination of both should be moot. Parents should have the choice to select based on value provided and afforded. Some of the work done by Centre for Civil Society (CCS) on voucher system since 2007 can be a model to build in innovative incentives in the system.

Act

Public policy and structures can help in behaviours and action that can create and magnify change. However, it is also true that change resides in the passionate work of the unreasonable man/woman which are not driven by external incentives and structures. We have to empower these innovators, if we wish to find workable solutions.

There are many positive changes that can aid innovators, doers and stakeholders in finding workable solutions at scale. Some examples of these are:

Leveraging Mobile Access to Develop and Disseminate Quality Knowledge Sources

There are a billion plus mobiles in our country and the recent competition of telecom players has made data inexpensive. This can herald an era of 'On-demand' knowledge with students being able to access courseware, online teachers via videos and podcasts or any information they seek with a veritable click of a button or a tap on their tablet or mobile phone.

A study supported by GMC showed kids are excited about accessing digital platforms but most of these platforms haven't been designed for stickiness resulting in lack of commitment. So, there is a huge opportunity on cracking this problem by designing educational products that are engaging. This year, GMC will be setting up an accelerator in mobile based "Self Learning to Self Earning" space for very early stage enterprises/social enterprises/NGOs to come up with solutions that tap into this opportunity.

Societal Platforms

Content is also becoming accessible and democratized through societal platforms that provide that base level content on which innovators/entrepreneurs can create socio-economic context specific solutions. Ek Step – a collaborative platform launched in 2015 to reimagine learning opportunities for every child and the National Teacher Platform – a self-learning module-based platform for teachers to improve their teaching efficacy and getting certified. Shiksha Lokam, provide access to free digital interactive content, but also a platform that would provide reference models anchored in evidence-based work for schools to adopt and customize to their specific needs.

The Catalytic Role of Impact Investors

Impact investors like GMC are taking a systems approach and partnering with innovators from across the spectrum to inspire, innovate, replicate and collaborate towards finding solutions. GMC sees education as the most powerful means of social and economic empowerment and reposes faith in entrepreneurs and enterprises in the form of investment capital to bring about this change. It endeavors to demonstrate a new way to do education impact investing which catapults us into a positive future.

It is looking at innovative funding mechanisms to support these changes through its education sector focused initiative called edLABS.

edLABS provides very early stage funding to 'visionary edu-preneurs'. The aim is to help build breakthrough solutions for Indian mass market that address education gaps, 21st century skills and future of work.

The innovative funding mechanism (up to Rs 1 crore) doesn't bind the enterprise to debt obligation nor does it dilute the equity of the founders. The pay back to edLABS is percentage of top line over next few years and is, therefore, variable and dependent on enterprise scaling successfully. Other than capital, edLABS provides global view, advisory support, networks and scale.

Since its inception in March 2017, edLABS has made five diverse investments - in behaviour architecture firm - Final Mile; education reform organization developing virtual and augmented reality curriculum - Chrysalis; AI supported maths tuition platform - Scorace; online learning marketplace with vernacular skill-based MOOCs - Unanth; and 21st century skill learning platform and organizer of Creativity Olympiads for kids - Kidovators.
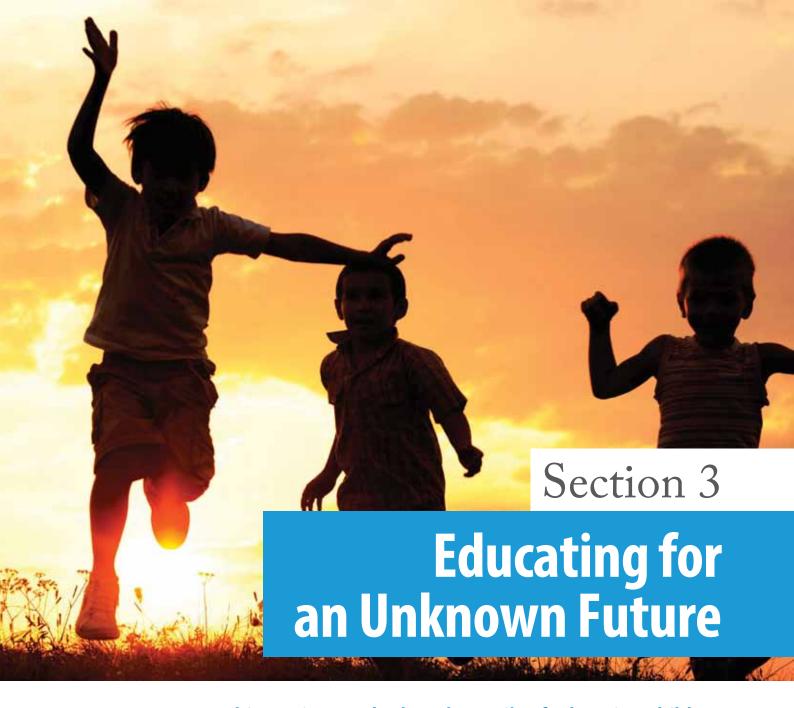
Further in its ecosystem work, GMC is working to strengthen affordable education by partnering with NGOs/Trusts and businesses aligned to its vision. Some examples include school transformation enablers like Mantra4Change and Muni Schools which has come up with frugal innovation models which other schools can replicate.

Its partnership with CCS and NISA is to support them in their journey of improving learning outcomes in BPS.

NISA has already developed a quality charter for enabling quality education in its schools and is asking its members to sign up to it voluntarily. This self-selection method is powerful to identify motivated early adopters who become change agents by not only declaring their intent but also showcasing their micro-innovations. It opens up the possibility of these micro-innovations getting adopted and replicated across other BPS.

Over the next few years, this ripple effect would enable change to happen from within the school system, hence be more sustainable. These schools could not only be BPS but choice schools for value and outcomes.

Together, let us innovate in our domains and synergies to crack the code to provide affordable 21st century education to all.

Section 3

Educating for an Unknown Future

In this section, we look at the perils of educating children for an increasingly unknown and uncertain future. From the parents' schooling choices to the children's aspirations, we focus on three specific innovations that go beyond standard curriculum and academic quality, and instead focus on sports, nutrition and creativity. A critical concern here is the affordability of innovations. This section will explore the current funding methods within schools as well as external sources. It also presents expert views on fee regulations governing private schools and brings to fore the new developments in education financing, methods of public-private partnerships and ecosystem development that can foster scalable impact.

3.1
Preschool Entrepreneurs: Pocket-friendly Innovations

It is every parent's dream to afford the best education for their children. While affordability is a concern at the household level, access to private schools has spread to far off rural areas. In fact, it is not the wealth of a region that defines the spread of private schools but the quality of government schools in a region. The worse the quality, higher the probability of finding a private school in any area.[39] Parental demand is the force driving the growth of private schools in the country. Here is how a parent explains his school of choice:

> " I grew up in Delhi near the busy, bustling streets of Sarojini Nagar. I studied in a school in my neighbourhood. Sports was my passion while growing up, especially football. That is what I wanted to become, a footballer. No one stopped me. I represented Delhi more than once in the Santosh Trophy. I was sure I would become a footballer. But, on a fateful trip to Goa, I injured my leg and was unable to play again. I had to change my career path. I found myself a job in a bank. It was not easy. However, over the years, I realized I was happy working with other people, and so I became a human resource manager at an export house.
>
> I have two daughters. I chose to enroll them in private schools as I wanted the best education I could afford for them. I wanted them to be disciplined, to have confidence in themselves, and to learn English. I would have been happy with whatever paths my daughters chose. However, they surprised me with their academic diligence. My elder daughter has graduated and is now working in Customs in Chandigarh. My younger daughter, Manya, studies in Sainath Public School, an afforable private school in Delhi. Unlike me, Manya is not a football fan. She enjoys learning science and loves to dance. She also loves to study. I like the school's focus on discipline and ethical values. More importantly, I appreciate how they encourage her to learn different forms of dancing. In fact, the school conducted a workshop that has inspired her to learn advanced forms of dance.
>
> Unfortunately, the school runs only through Grade 8. A crucial step is to find a new school for her. I intend on choosing a private school that will help her stay focused on what she likes—science and dance.
>
> - Samir Das, a father of two daughters

Within low-income group, parents with higher aspirations consistently choose private schools.[40] At what stage does the choice of a private schools begin? It turns out that parents choose private education as early as in preschool. In its study 'The Preschool Promise', FSG explores preschool preferences of 4,407 low-income households from eight cities.[41][42] Interviews of parents from low-income households revealed that a significant proportion of children from these groups were enrolled in preschools: "96 percent of five-year olds, 94 percent of four-year olds, and even 45 percent

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[39] *Muralidharan and Kremer 2006; Kingdon 2017*

[40] *Galab, et al. 2013*

[41] *Irfan, et al. 2017*

[42] *The report categorises 70% of urban India as "working poor," the lower-end of which includes daily wage labourers and those employed in the informal sector. Only 10% of the population is worse off.*

of two-year olds were enrolled in a pre-primary class." 86% of these parents prefer private preschool education over government alternatives.[43]

The factors influencing parental choice are: proximity, quality, integration of English-learning in the curriculum, and whether the preschool is affiliated to a school. Academic improvement is the key motivation for parents to enroll children in schools early on.

Preschools are, however, not accessible to all sections of the poor. According to estimates of Sattva Consulting, over 24% of children between the ages of 3-5 years do not have access to early childhood education. The proportion is much worse in states such as Uttar Pradesh and Rajasthan, where it ranges from 40-80%.[44] This can be a result of either a lack of funds and awareness among parents, or merely a lack of options.
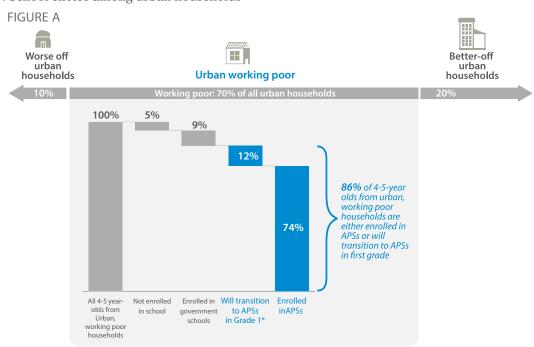
The problem of early-childhood education is acute for low-income migrant communities. According to American Indian Foundation, about 72 million people migrate from their homes every year in search of jobs.[45] Many of these migrants work as daily-wage labourers and are unable to focus on the education and health of their children. Thus, malnutrition and child labour are far more common in these households. Effective and immediate interventions, starting from preschools, are needed in these migrant communities to bring their children into the formal system of education.

Traditional preschools are often expensive. A government-appointed fee committee in Chennai found that some preschools charge as much as Rs 30,000 more than what a primary school would cost.[46] For many parents, this is unaffordable. Does it need to be so expensive? Can lack of access be addressed? Stories of preschool admission rush have been standard for over a decade now. A 2004 CSmonitor article mentioned how "in 21st century India, where spaces at even ordinary preschools are far fewer than the demand." The market for preschool, today, is experiencing high growth, especially from tier II and tier III cities.[47]

While the government readies itself to provide preschool education through Anganwadi workers, the private sector is also actively generating low-cost alternatives, especially as the preschool space is not as heavily regulated as elementary education. This section, through interview with founders, briefly discusses three innovative models that have brought quality preschool education at low cost to areas where no such interventions exist.

Figure 10: School choice among urban households

*Assumes that those attending a private provider without grades beyond Kindergarten will transition to an APS in first grade because they believe private schools to be of superior quality.

Source: Figure A, The Preschool Promise: The Opportunity to Transform Learning Outcomes for India's Working Poor; Note: The report refers to BPS as Affordable Private Schools (APS).

[43] ibid, page 25
[44] Balakrishnan, et al. 2017
[45] American India Foundation
[46] Times News Network 2013
[47] Business Wire 2017

HIPPOCAMPUS LEARNING CENTRES:
From 17 to 285 'Locally Grown' Low-cost Preschools in Five Years

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Based on an interview with Umesh Malhotra, Founder, Hippocampus Learning Centers (HLCs) and insights from two parents whose children study in HLC

The lack of quality providers in early childhood education is what drove Umesh Malhotra to develop Hippocampus. His journey started off with a "Grow by Reading" library initiative in 2007 but, his conversation with a parent who expressed a lack of preschools in the village is what bred the idea of learning centres. Children who join school in Grade 1 struggle to cope with the syllabus leading to eventual dropouts. Umesh realised he needed to do more than creating library spaces. He developed the idea of low-cost preschools to bring in children from remote areas into the school system. Locally hiring and training teachers allowed him to manage expenditure. He envisages to make Hippocampus a reality for as many children in India as the entire population of Finland, at one percent of its cost by 2020.

In absence of research on benefits of attending a preschool, Abdul Latif Jameel Poverty Action Lab (J-Pal) has collaborated with HLC to study the impact of a kindergarten program on "children's cognitive and socio-emotional development as well as their learning outcomes in the first year of primary school" across 71 villages in Karnataka.[48]
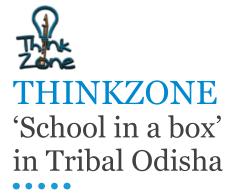
Following is a synopsis of an interview with two HLC parents.

> 4-year old Bharat studies in junior KG. His father is a mason, and his mother is a homemaker. His parents want better education for him, but they are not very clear on what they want from a school. All they know is that they want to choose the best school they can afford.

> Vedant has been studying at Hippocampus for some time. He is four years old. His father, Mallikarjun, is a tailor and his mother is a homemaker. They studied in Kannada medium schools. Given a choice, they will choose a private school for Vedant which teaches him English. Hippocampus for them, allowed their child to learn English.

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[48] *Dean and Jayachandran*

WINGS:
Preschooling at Scale
● ● ● ● ●

Based on an interview with Pravin Atluri, Managing Director, BatWings Learning Centres

Wings, backed by the impact investment firm GMC, started as an after-school program for students from Grade 1 to 5 in Bengaluru and Kolkata. The initial years taught them that parents found it difficult to understand why academic results did not change immediately post implementation of the Wings curriculum. There were dropouts. In 2016, they experimented with a kindergarten program that received a good response. Realising the difficulty of managing the financial aspects of such a program soon, they decided to become what they are today: academic solution providers for schools and kindergarten centres. They ran 17 pilot projects in areas such as Mandya (14 projects), Mysore (1 project), Bengaluru (2 projects)—before the official launch of their program in June 2017.

Their kindergarten program includes books on logic, social science, health, literacy, numeracy. The curriculum has various components including instruction methods and pedagogical aspects that are unique to Wings. For example, it takes five days to introduce each alphabet through activities focused on phonics. The program also includes 10-15 days of training on physical development, motor skills and child development for teachers who implement the program. Post implementation of the program, the team visits the schools once a week to observe.

THINKZONE
'School in a box' in Tribal Odisha
● ● ● ● ●

Based on an Interview with Binayak Acharya, Founder, ThinkZone

In a fishing village of Jhadakuda in Ganjam, tribal Odisha, parents proactively enrol their kids at ThinkZone. ThinkZone has implemented scalable early-childhood and primary grade programs based on two pillars: interactive online learning material and training the local women. These two together ensure children feel comfortable and are not daunted by the curriculum of the program. The interactive "learning-by-doing" curriculum on the tablets also enables teachers without experience to deliver high quality education.

3.2
Empower Children to Dream

School life is a magical time for most children. When they reflect upon school days, they remember their school, often with nostalgia, sometimes with dread, but mostly with a deep sense of gratitude for all that they learnt. For the most part, students trust the schools with their future. But will that remain the same in the future?

Several questions come to mind as we consider the present system of education. Are we preparing the children for the future or overloading them with outdated curriculum? Are we fuelling their dreams and ambitions? Are they enjoying learning or are they becoming passive participants of a standardised system? When they look back, will they remember their school days with joy, regret or indifference?

> " I always had a desire to write about the school, and 16 years after leaving it, I got my chance. All my boyhood memories of school life, of friends, of teachers, of Ferozepur gushed up like a stream of fresh water from the subconscious of my mind. How do you describe 14 years of your life in 100 odd words?
>
> Without the table tennis sessions, I wouldn't have learnt that it's okay to make mistakes - I'll get another chance. Without my teachers, I wouldn't have learnt the art of having people learn something and making it enjoyable.

> Without the debates / declamation contests, I wouldn't have learnt the value of good communication. Without the dreaded report cards, I wouldn't have learnt the value of setting and achieving goals. Without the mental ability tests, I wouldn't have learnt that having a great aptitude will go a long way in achieving success.
>
> Without this school, I wouldn't have been what I am.
>
> - Manish Puri,
> Decent Children Modern School,
> Punjab, batch of 2001

What would the children of the future say about their schools? Everyone has read articles that remind us: "You Will Lose Your Job to a Robot—and Sooner Than You Think."[49] The children are walking into an unknown future, perhaps like a page from a science fiction novel. A lot of the current discourse around education is focused on learning, school infrastructure, and quality of learning outcomes. The future might not be as apocalyptic as some make it, but the question of the significance of our education system in a fast-changing world remains relevant.

Some say creativity is the answer. One small step in this direction is to develop a holistic space that provides the necessary environment for unadulterated expression and growth. This section explores ideas of three entrepreneurs that bring value and meaning to BPS at a low-cost.

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49 Drum 2017

BRING BACK 'PLAY'

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Many schools, especially those in densely populated urban areas, do not have the space to create large playgrounds where children can run free. The constraints for BPS are more; even when the required space is available, schools run on a low fee charged by parents and do not have the capital required to invest heavily in infrastructure. As Prof. Kingdon points out, 26.5% private schools in the country charge a fee lower than the minimum daily wage.[50] It is no surprise then that 40% of schools in the country lack play space, a number that has stayed largely stagnant over the years.[51] In fact, taking into account the "genuine difficulties" faced by schools, certain state governments such as in Karnataka have relaxed the rules for playground.[52]
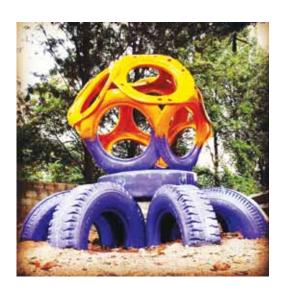
Anthill Creations: Playgrounds from Scrap Tyres and Waste Materials

Based on an interview with Pooja Rai, Co-Founder, Anthill Creations

Pooja Rai grew up in a middle-class urban family that expected her to follow the standard become-an-engineer route. She cleared the IIT entrance exam, the hallmark of success for many Indian families, and studied architecture. She bagged a job as a product manager for a firm.

However, she soon realised that her happiness came from giving back to the society. She worked on early childhood education solutions in slums and built play spaces for children, drawing inspiration from her parents. At some point, this activity transformed into a social enterprise with the help of her college friends. As she journeyed across India as part of the Jagriti Yatra, the problems she could solve became clear to her. Making kids learn through outdoor-activities was something she wanted to bring back to schools, something worth quitting her job for.

Anthill Creations' vision is to make play space accessible to all children. Playing, the founders believe, is not a luxury, it is a necessity. Their

current model of playgrounds is affordable and efficient, and can be constructed in less than a week and with a budget as stringent as Rs 20,000.

The journey, however, was far from easy.

Pooja shares some of the comments she had heard that ranged from, "Children do not need

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[50] Kingdon 2017

[51] National University of Educational Planning and Administration 2015-16

[52] S. 2017

to play. They need to focus on their studies," and "They will get hurt if they play outside." There were positive statements as well: "What is a school without a playground?" or "It is very important for the holistic development of children."

They found that the negative responses were not just because of a lack of awareness but also a question of affordability. Playgrounds were expensive to build and maintain; they could only be built with materials like metal and plastic.

It was this lack of low-cost play equipments and space that they set out to resolve. What they were able to demonstrate is that by using waste material and 'do-it-yourself' designs, anyone can build a playground. The entire process of creating a play space with the participation of children enhances the experience of playing.

The team realized that reaching every child is possible only if leaders from within the community understand the benefits of playing and are motivated to build spaces for the children in their community.

Pooja adds, "The first question that anyone who visits our playground asks us is if we train the children to use these equipment that we build. We believe that if we have to tell the child how to play then we are not doing it right. We just need to create a safe environment for children where they can play and learn on their own. We have seen this while building these playscapes as well. As soon as the tyres arrive at the school, children start to build something by
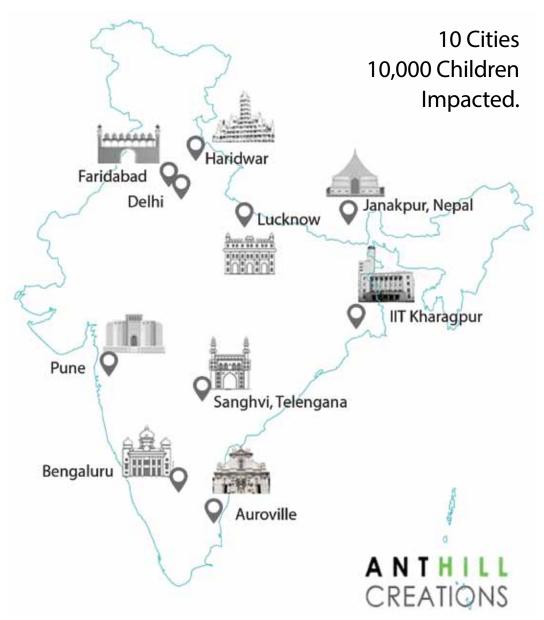

themselves. If there is a slide to come down, there will always be one child who will go up the slide, so you can't really tell children how to play. In fact, we cannot even imagine the hundreds of ways they invent to play around these elements and that is the beauty of free play."

The feedback from teachers also echoes this belief.

A teacher at Sri Guru Harkrishan Public School in Bengaluru recalls how, on completion of the playground, a student remarked that the playground was an example of reusing waste tyres, similar to the '3R' (Reduce-Reuse-Recycle) concept that she had taught them.

"Children have an immense amount of energy

10 Cities
10,000 Children
Impacted.

Faridabad
Haridwar
Delhi
Lucknow
Janakpur, Nepal
IIT Kharagpur
Pune
Sanghvi, Telengana
Bengaluru
Auroville

ANTHILL
CREATIONS

Source: Data shared by Anthill

and it is very important for them to channelise it constructively. If they don't get to play, they end up spending their energy fighting with each other." - Ashwini M Chikmath, teacher.

"Children are naturally curious and are explorers. They learn through playing, while interacting with the space around them. If you don't give them that chance to play, then their brains do not develop to its full potential, and the impact of this is going to last a lifetime." - Pauline John, Teacher

Playing also teaches other skills. When children stand in queues, waiting for their turn on

the swing, they are learning self-control and patience. The team has been able to build play spaces in over 10 cities so far.

How useful is this for BPS? Innovative

alternatives like the one proposed by Anthill Creations, provide inexpensive solutions that can aid in the holistic development of children. It can also be used to transform unused, indoor spaces, or library spaces into creative, playful corners like the example below:

Transforming Unused Spaces of Florida English School, Goripalya, Bengaluru

Interestingly, in 2016, the Florida English School was already working with Mantra4Change on a School Transformation and Empowerment Project (STEP) with the objective to create a reading space for students. 120 tyres and 6 days later, they created something out of nothing but with the aid of similar passion driven organisations. They also ran a crowdfunding campaign that helped raise Rs 72,751, more than their stated goal of Rs 66,180.[53]

The finished space was colourful, creative, and more importantly, a result of children's imagination. By building indoor and outdoor spaces, and allowing children to participate in the creation of these places, not only are interactive spaces made available to them, but this also makes schools engaging and exciting. It makes learning fun!

Little hands joined in sheer delight with all might and main

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[53] Mantra Social Services 2016

RETHINKING CHILD HEALTH

Based on an interview with Dr Anand Lakshman, Founder and CEO, AddressHealth

When Dr Anand Lakshman and Dr Anoop Radhakrishnan graduated from medical college, they were sure that they did not want lucrative and comfortable careers in the field of medicine but wanted to take risks for the larger good. While working on WHO programs for treatment of tuberculosis and diarrhoea, they realised the various challenges of healthcare in India. A key impediment is the lack of preventive healthcare measures of which children, especially in economically backward areas, are the most vulnerable victims. The doctors decided to tackle this challenge.

What are the health interventions administered in schools? The data from the 2015-16 DISE reveals that less than two-third of all schools organized annual medical check-up camps in 2015-16. However, to ensure better health, medical camps are not enough. Instead, ongoing interventions and programs are needed.

Their initial idea was simple - create a collaborative environment of parents and doctors to effect a positive impact on prevention of chronic diseases. The community has to be engaged. Their chosen space for this engagement was schools. That was the origin of AddressHealth, a Bengaluru based chain of child speciality clinics, working closely with schools.

Figure 11: Percentage of schools that organised annual healthcare checkups, 2015-16

> 75%

< 40%

40-75%

Source: Unified District Information System for Education 2015-16

By 2014, they engineered a health program on WHO guidelines—health services in school, health education, nutrition, mental health counselling, school environment, physical activity in schools, health promotion, and family and community involvement.

In 2015, they piloted their tele-enabled school health model which included health check-ups, identification of key interventions needed, health education, counselling and follow-ups in four Bengaluru schools.

What are the health challenges children from low-income households face?

A school-based survey of over 100,000 children across 138 schools conducted by the organisation in 2016-17 found that children in low-fee schools are at a higher risk of malnutrition and dental caries as opposed

Table 7: Disease patterns by school type, 2016-17

Patterns by annual school fee	Obese BMI	Overweight	Too thin	At risk of lifestyle diseases	Vision defects	Dental caries
Less than 15,000	4%	7%	15%	7%	13%	35%
15,000-45,000	6%	10%	10.5%	17%	17%	27%
Higher than 45,000	11%	17%	5%	5%	21%	25%

Source: AddressHealth 2017

to children from high fee schools who are prone to lifestyle-related diseases.

Currently, the firm conducts 8-15 weeks group therapies for children. They also interact with parents on psychological needs of the children. They create awareness on how to help children who are hyperactive. Provision of medical facilities, maintenance of medical records and training in emergency procedures as well as looking after preventive care for commonly recurring diseases are some of the activities they undertake for schools.
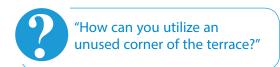
Impact

Since AddressHealth launched in 2014, they have helped over 200 schools and over 1 lakh children. About 50% of these schools are BPS. There are multiple ways the team addresses the concerns of space and cost for BPS. For example, one option is to set up an after-hours school clinic which helps generate revenue and pay off the cost of services and at the same time helps children from the locality. By 2020, they hope to bring healthcare to 1 lakh children and all they need is an hour of each school in a year, to nurture a healthier society.

CREATIVITY IS NOT 'OUT-OF-SYLLABUS'

Based on an interview with Priyadeep Sinha, Founder and Chief Executive Officer, Gyan Lab, Kidovators

> **?** "How can you utilize an unused corner of the terrace?"

The diversity of responses to a single question asked in Kidovator—Gyan Lab's Creativity Olympiad—is astounding; students suggested options including building a bird bath fountain, a dog shelter, a juice kiosk or a vertical greenhouse.

It turns out that creativity, that is, "The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem," is one of the top three skills we will need in the next decade.[54]

The current design of the education system makes it difficult for teachers to experiment or go beyond the prescribed curriculum. In his final year at Manipal University in 2011, Priyadeep Sinha came up with a plan to equip school students with skills relevant for the 21st century, which led to the development of Kidovators in 2014. The program focuses on enabling children to learn through solving real-world problems and develop creative skills that can arm them for the future of work. Every year, they conduct a Creativity Olympiad which showcases the inherent creativity of children irrespective of the school a child comes from. They have also developed a curriculum to help children build such skills.

Skills changing from 2015 to 2020

in 2020	in 2015
1. Complex Problem Solving	1. Complex Problem Solving
2. Critical Thinking	2. Coordinating with Others
3. Creativity	3. People Management
4. People Management	4. Critical Thinking
5. Coordinating with Others	5. Negotiation
6. Emotional Intelligence	6. Quality Control
7. Judgement and Decision Making	7. Service Orientation
8. Service Orientation	8. Judgement and Decision Making
9. Negotiation	9. Active Listening
10. Cognitive Flexibility	10. Creativity

Source: World Economic Forum 2016

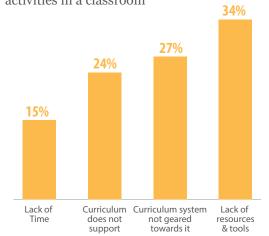[54] *World Economic Forum 2016*

Why Schools Kill Creativity?

'Do Schools Kill Creativity,' a 2006 talk by Ken Robinson features as one of the most watched TED talks of all time. To our advantage, Gyan Lab and Sylvant Advisors explored the 'why' of this question through a survey of 1,000 individuals from different backgrounds including educators, corporates, parents and students. They concentrated on low to high fee schools to understand the expanse of creativity in Indian schools.

They found that it is not just lack of time, but also (and more importantly) a lack of resources. It is not surprising that students are at their creative best during projects and experiments.[55]
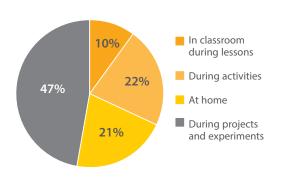
Most children used words such as unique, imaginative, new, different, and out-of-the-box to define creativity. When asked to choose the most creative out of the five famous names—Narendra Modi, Albert Einstein, PV Sindhu, MF Husain and Deepika Padukone—Albert Einstein won the most votes showing children's instinctive association of creativity with science and technology.

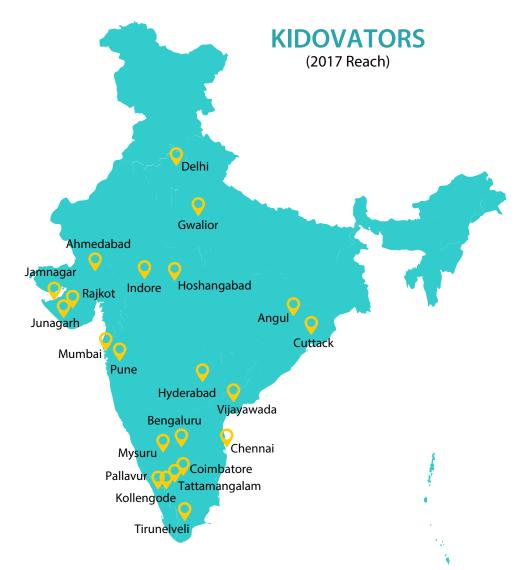Figure 12: Bottlenecks to creativity based activities in a classroom

Figure 13: Activities at which students feel at their creative best

Source: Gyan Lab and Sylvant Advisors 2017

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[55] Gyan Lab; Sylvant Advisors 2017

KIDOVATORS
(2017 Reach)

Delhi

Gwalior

Ahmedabad

Jamnagar

Rajkot

Indore

Hoshangabad

Junagarh

Angul

Cuttack

Mumbai

Pune

Hyderabad

Vijayawada

Bengaluru

Mysuru

Chennai

Pallavur

Coimbatore

Tattamangalam

Kollengode

Tirunelveli

Impact

As of 2017, the Creative Thinking Curriculum and Olympiad has reached 10 states, 22 cities, 51 schools and over 5,000 students. Of these, over 1,300 students are from BPS. His intention is to scale it to 1 million students by 2025.

14 out of 51 schools are low-cost schools. On asked about the relevance of intervention for BPS, he feels that no group of children have an advantage over others in the 21st century for skills such as creativity and problem-solving skills. A lack of exposure to such practices has created a level playing field for all students and schools to perform well in the Creativity Olympiad.

One of the fundamental differences, he realised, is the focus BPS principals have on the enhancement of English and the willingness to nurture the imagination of students. The Kidovators program provides recognition to such existing future-

ready skills. He feels, the children of BPS, have the most to avail from such programs.

Priyadeep feels that, "the education sector is one where the saying 'build painkillers and not vitamins' is extremely relevant. When we launched the Creativity Olympiad, we had to first educate our customers and consumers about the need for such a program and then sell. However, it was our ability to properly explain the absolute need that struck a chord with schools as well as parents."
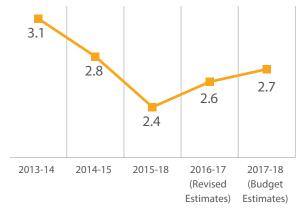
3.3
Funding Edupreneurs

The Economic Survey 2017-18 reveals that government spending on education as a percentage of GDP has remained close to or less than 3% of the GDP since 2013-14.[56] Juxtapose this with the fact that we are among the top five nations globally for out-of-school children for 6-11 age bracket.[57] We are far from Kothari Commission (1964-66) recommendation of 6% of GDP or even from what comparable economies such as Brazil and South Africa spend on education.
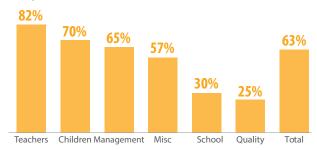
A look at the share approved of the proposed budget under Sarva Shiksha Abhiyan 2015-16 reflects the priorities of the government. The budget head 'Quality,' that is untied funds for improving learning through innovations, received only 25% of what was proposed by the state government.[58]

Figure 14: Trends in education expenditure as percentage of GDP by general government (Centre and states)

Source: Ministry of Finance, Government of India. 2017

Figure 15: Share of proposed budget approved, 2015-16

Source: Kapur and Srinivas 2016-17

The Education for All Global Monitoring Report 2015 suggests that the annual cost of universal pre-primary, primary, and secondary education in low and lower-middle income countries is expected to more than double from US$ 149 billion to US$ 340 billion by 2030 to meet the costs of increase in number of students, to address marginalisation and to bring the required improvements in quality.[59]

Besides insufficient funding, several questions have been raised by experts on accountability of the current spending, given the consistently poor performance on learning outcomes. On one hand we desire more spending, and on the other, we question the value-for-money of existing funds being poured into the education system. Have we then reached a deadlock?

Role of Private Investment

Innovations require investment. Private spending on education has bridged part of this investment gap. In fact, the expenditure on education has increased the

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[56] Ministry of Finance, Government of India 2017

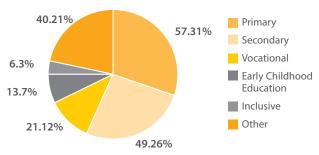[57] Sahni 2015

[58] Kapur and Srinivas 2016-17

[59] UNESCO 2015

most amongst all other household expenditure heads.[60] Private schools have been the chosen recipient of the increased spending, playing a key role in pacifying the rise in demand for education. In some way, BPS owners are education entrepreneurs, developing schools both as an extension of their vision but also for monetary benefits. In most sectors, investors support entrepreneurs, and we have all seen and been a part of the recent start-up revolution. Does this hold true for education, one of the pillars of social well-being and economic growth? Who are the investors supporting the education expansion? There are only a handful of firms like Varthana that work with affordable schools and provide them with secured and unsecured loans. What are some of the alternate sources of funding that can be tapped? Can philanthropic capital and private funding step up to fill in the gap in funding?

Education segment has fortunately received the highest interest from multiple sides including High Net Worth Individuals (HNWIs), Corporate Social Responsibility (CSR) funds and philanthropic foundations. Impact investment is at a nascent stage focusing primarily on middle to higher income groups with a focus on preschools and technological solutions. Following is a summary of the amount of such investments, and the focus areas.

1. Corporate Social Responsibility

Figure 16: Break up of CSR funding in India, USD million and percentage, 2016

Source: Balakrishnan, et al. 2017

2016 observed a CSR spending of USD 419 million from 1,158 companies.[61] An analysis of 151 companies and 567 projects in 2015-16 in the 'Funding Education with Impact: A Guide for Social Investment in India' report reflects that elementary education was a primary recipient of funding. Secondary education followed suit with a total investment of USD 48.9 million.

2. High Net Worth Individuals and Philanthropic Foundations

Education is a favorite among HNWIs and family foundations in India with 54% of 377 HNWIs surveyed choosing it. The sector received a total funding of USD 127 million in 2016 including contributions from key individuals and foundations such as Azim Premji Foundation, Shiv Nadar Foundation, Piramal Foundation, Reliance Foundation, Rakesh Jhunjhunwala and the Poonawalla Foundation.[62]

Table 8: Estimated number of days to be taken by fee regulatory committees in six states to examine fees for schools

Examples of global and local foundations active in different education segments include:	
Early Childhood Education	Charities Aid Foundation, Global Fund for Children, Age Khan Foundation, Sir Ratan Tata Trust
Primary Education	Bill & Melinda Gates Foundation, Draper Richards Kaplan Foundation, Global Fund for Children, Michel & Susan Dell Foundation, Piramal Foundation
Secondary Education	MacArthur Foundation, Azim Premji Foundation, Central Square Foundation, Draper Richards Kaplan Foundation, Sir Dorabji Tata Trust, Michel & Susan Dell Foundation

Source: Balakrishnan, et al. 2017

Impact Investment

Education has so far failed to attract the attention of impact investors; of the USD 4.1 billion invested over 2010-15 in India, only 2% found its way to the sector.[63] Of the total money spent, private preschools and school management services are two areas with the highest financing, partly because they do not attract extensive government regulation as is the case for primary education.[64] Moreover, investment is directed more towards middle to higher income groups as opposed to lower income groups (or BPL) as the former has a higher potential for revenue generation.[65]

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[60] *Shukla and Bordoloi 2015*
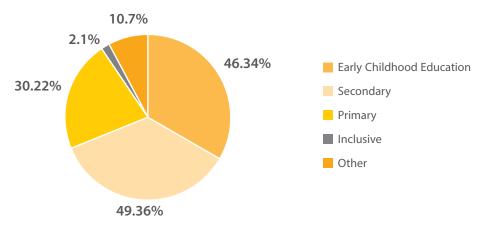[61] *CRISIL Foundation 2017*
[62] *Balakrishnan, et al. 2017, citing Bain et al. 2015 and Hurun 2017*
[63] *Balakrishnan, et al. 2017, citing Sengupta 2016*
[64] *Malani 2016*
[65] *Balakrishnan, et al. 2017, citing Sengupta 2016*

Figure 17: Break up of impact investment in India, USD Million and percentage, 2014-17

10.7%
2.1%
46.34%
30.22%
49.36%

Early Childhood Education
Secondary
Primary
Inclusive
Other

Source: Balakrishnan, et al. 2017

Despite a significant proportion of private investments making way into education, there are several limitations. Only a handful of organizations have invested in system-wide interventions; most programs have a myopic vision generating only short-term wins and often resulting in duplication of efforts. Only six foundations have spent USD 7.4 million in interventions that may result in sizeable impact; a meager amount compared to the generous funding needed to scale up such interventions.[66]

Although BPS address the education needs of a significant share of the population, due to the scattered and singular nature of BPS schools, and the stringent government regulations, only a small proportion of funds have been invested in this space.

The lack of attention to a significant contributor, BPS, illuminates the challenges we are faced with today and the distance that needs to be covered before we achieve 'quality' universal access. The every-day troubles school leaders face such as unfavourable laws and financial insecurity require consideration. Without policy interventions, government support, and an attitude of collaboration between public and private institutions, it is not possible to realise the goal of sustainable and affecting change in education in India.

3.4
Blueprint for Change

This part presents three articles that discuss system-wide challenge and suggest reforms: first, that examines existing fee regulation models in seven Indian states to highlight the core issues facing BPS. In the next two articles, Ritika Chawla, a research writer, discusses the rise of private schools in small census town in Hastal in north-west Delhi followed by a Centre for Civil Society pilot that aims to study the effect of disseminating information on learning outcomes and school characteristics on parental choice and school competition.

Analysis of Private School Fee Regulation Acts in India

Aatish Kumar Verma and Vineet Bhalla are Research Associates at Centre for Civil Society

Introduction

Should private schools be allowed to decide the fees that they may charge from their students? In the Indian context, the answer to this question is far more complex than what it may appear to be. The answer, in fact, varies as seen from the eyes of different stakeholders - parents, school owners, teachers, regulators, and larger public or media. Over the last few years, in the wake of several complaints by parents, this question has been taken up before many state governments and the judiciary too. State governments, on their part, have shown a tendency to favor some form of control over fees charged by private schools. However, whether government control over an activity that is provided by private entities is reasonable, and to what extent, are questions that haunt policymakers tasked with regulating fees in private schools.

This paper doesn't claim to answer these questions around fee regulation. It examines existing fee regulation models in seven Indian states in an attempt to highlight the core issues underlying fee regulation today.

The second section of this paper examines the context in which fee regulation has become a contentious issue. The third section provides 'snapshots' of existing fee regulatory regimes in various states in India and the fourth sets out a brief comparative analysis of the regulatory models in these seven states.

Finally, the concluding section sums up the lessons from regulating fees in India, and highlights the broad concerns that remain. An annexure provides a concise overview of the regulations undertaken in the chosen seven states.

[Please note that in this paper, the terms 'school' and 'private school' have been used interchangeably, and refer only to private unaided schools/self-financed independent institutions, unless specifically stated otherwise.]

Context

Legal Contours of Fee Regulation

Before we examine the specific fee regulation statutes enacted by different states, it is useful to appreciate the existing legal contours within which fee regulation laws exist today.

Given the evolution of jurisprudence governing private school fees and the purpose of education in India,

the following principles could be stated to guide fee regulation for private educational institutions in India:[67]

a. Private educational institutions (which include private schools) must be allowed to make a reasonable surplus.
b. The surplus must be used by the institution only for furthering growth and development of better facilities for the beneficiaries.
c. The surplus must not be used for profiteering by the school management.
d. Schools must not charge any capitation fees.

Price Control Theory

In economic terms, fee regulations are a form of price control, that inhibit the school's right to charge fees beyond the prescribed limit. However, there is ample evidence across the world to show that price controls are economically unsound.[68] When price is controlled artificially in one sector, it forces entrepreneurs and talent to seek better opportunities in other sectors, creating further shortage in supply.[69]

There are plenty of examples from world history which have taught us this lesson over and over again. The regulation of commodity price in Paris in 1973, for instance, resulted in producers reducing the quality of their products and in the rise of a parallel black market to provide services that the legal market could not provide at the fixed prices.[70] In communist Poland, the government kept the prices of television sets artificially low, leading to fewer producers who were incapable of meeting the demand generated by the lower price.[71] Ultimately, the cost of regulation of television sets to Poland's economy was ten times the industry's total sales.[72]

In the case of education, therefore, price controls could either lead to reducing the number of available schools, or create a parallel market of unrecognised schools that cannot be regulated by the government. The schools themselves, even if they can avert the fate of shutting down, will still have to engage in forced cost-cutting, leading them to cease functioning efficiently and thereby losing the incentive to perform better.

Private Schools - Numbers and Fees

To best paint the context in which we examine the need for private school fee regulation, we must understand the space occupied by private and government schools respectively. Estimates suggest that in 2010-11, the number of private schools in India was approximately 2,19,574 while the corresponding figure for government schools was 10,35,899.[73] By 2015-16, however, the number of private schools increased to 2,96,637, i.e. a growth of 77,063 schools in five years, while government schools, in the corresponding period, increased by only 12,297, to 10,47,899.[74] Evidently, there has been a steep rise in the demand for private schools vis-à-vis government schools, which is matched by similar trends in enrollment figures too.[75]

A study by Geeta Gandhi Kingdon, that uses DISE data to dissect the growth in private school enrollments, traced this student migration to the belief among parents that private schools offer better value for money and better teaching than government schools. Additionally, multiple evaluations after controlling for students' home backgrounds indicate that "children's learning levels in private schools are no worse than, and in many studies better than, those in government schools."[76]

Data on actual average private school fees in states in India must also be considered in order to understand the range and scale of fee charged by schools that is sought to be regulated. Kingdon, in the Review of the Private Schooling Phenomenon in India, calculates median private unaided school fee level in urban India at Rs 542 per month and in rural India at Rs 292 per month.[77] Taking all India (rural and urban), the median fee was Rs 417 per month. There is also a great deal of inter-state variation in median private school fee levels. For example, the fee varies from Rs 117 per month in rural Uttar Pradesh to Rs 885 per month (seven and a half times higher) in rural Tamil Nadu; or from Rs. 250 per month in urban UP to Rs 1800 per month (seven times higher), in urban Delhi.

However, Kingdon shows that the average fee charged by private schools is a fraction of the per-pupil expenditure in state funded schools, and is well within the average household budget. For example, the median monthly

67   Unni Krishnan and Ors. v. State of Andhra Pradesh and Ors., 1993 SCR (1) 594, T.M.A. Pai Foundation and Ors. v. State of Karnataka and Ors., AIR 2003 SC 355, Islamic Academy of Education and Anr. v. State of Karnataka and Ors., (2003) 6 SCC 697, P.A. Inamdar v. State of Maharashtra & Ors., (2004) 8 SCC 139, Modern School v. Union of India, (2004) 8 SCC 537.
68   Rockoff 2018
69   Sowell 2009
70   Morton 2001
71   Tarr 2010
72   ibid.
73   Kingdon 2017
74   ibid.
75   ibid.
76   Saha 2017
77   Kingdon 2017

private school fees in India (Rs 417) is less than half of the per-pupil expense in government-funded schools (Rs 1091).[78] Additionally, the average annual private school fee is only 9% of state per capita GDP; 26.5% of rural private schools have monthly below daily minimum wage.[79] It is not clear why the high per-pupil expenditure in government schools is seen as necessary and noble but exploitative in private schools. One is paid by parents directly and the other by the taxpayers. Not only private schools charge significantly less than the expenditure incurred in government schools, but the cost is far from exploitative if take the per-capita income and the minimum wage into account. It can be argued that a few outliers possibly shape the public opinion on private schools.

School owners and education specialists often attribute hikes in fees to the huge establishment costs in leasing land and other capital expenditures, necessitated by recognition norms under the Right to Education Act and state-specific statutes. This often means that school fees have to cover for the servicing of these loans by the educational institution. In this context, D. Shashi Kumar, General Secretary of Karnataka State Private School Management's Association highlights a pertinent question - *"In Bengaluru, the Bengaluru Development Authority reserves land for educational institutions, but how much of it is actually sanctioned to schools?"* [80]

India has opts for varying models of fee regulation in different states, which have had their own set of successes and setbacks. However, just like median fees vary across different states, approaches by different states have to be in line with the level of fees and the degree of unreasonable hike by the individual schools, as opposed to a single policy aimed at all schools, irrespective of their actions or legitimate need for raising fees. As we discuss more in Section IV, indeed state experiences and approaches with private school fee regulation in India have tended to be different from each other.

State Snapshots

This section focuses on the salient provisions of individual state regulations along with the actual experience of their implementation within these territories. Details of specific provisions for each state have been listed in the matrix featuring key aspects of fee regulation norms by states.

A. Tamil Nadu

Tamil Nadu was the first state to enact a law to curb fees charged by private schools.[81] The Tamil Nadu Schools (Regulation of Collection of Fee) Act 2009, paved the way for other states to address the seemingly excessive hike of fees in private schools.

The statute highlighted the need for private schools to justify their fee structure while allowing them the autonomy to frame their own fee policies. These fee policies submitted by private schools are reviewed by district fee regulatory bodies affiliated with the state approved Board of Education existing within these districts.[82] Such reviews would comply with factors of fee determination stipulated by the Act while allowing for private schools to earn "reasonable surplus" which ought to be committed to increasing the efficiency of the school.[83]

The state's efforts to curb the private school fee hikes have been welcomed by parents while several criticisms emanated from private schools themselves. For eg., the setting of fee-structures for a period of three years was termed as a display of myopic tradition that does not account for unforeseen rises in expenditure. Instances where private schools began the practice of charging for extra-curricular activities, seemingly as a means of collecting more fees, came into light.[84] While subsequent court judgements upheld the charges, the provisions that extra-curricular fees were not compulsory and students may opt out were made clear.[85]

In a scenario where the fee regulatory committee is supposed to fix the fees for all private schools, the Tamil Nadu government might face a massive hurdle of implementation. Even though there are 10,946 private schools in Tamil Nadu for 2015-16,[86] the Fee Regulation Committee, on its website, has announced the fee structures for only a fraction of these schools so far. Further, it can be observed while reviewing the fee structures set for these schools for 2013-16, that the year-on-year fee hike for each school for each grade has been consistently fixed at 10% of the previous year's fee. Such a uniform rule for all schools across the state fails to account for legitimate unforeseen expenses and unique capital investment status on the part of individual schools in any particular year.

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[78]   ibid.
[79]   ibid.
[80]   M, Akshatha 2016
[81]   Ambast and Gaur 2016
[82]   The Tamil Nadu Schools (Regulation Of Collection Of Fee) Act, 2009 s 7
[83]   Ibid., s 6
[84]   Jagannathan 2017
[85]   ibid.
[86]   Kingdon 2017 Table 4

B. Delhi

In Delhi, the basic fee regulation framework for private schools is provided by Chapter VI of the Delhi School Education Act, 1973. Section 17 of the Act states that the school management must file with the Directorate of Education, before the commencement of each academic year, a full statement of fees to be levied by the school during the ensuing academic year. Section 18 of the Act provides for the way in which private schools may use their income and other components of the school fund and Chapter XIV of the Delhi School Education Rules, 1973 further adds to these stipulations. The Rules under this Chapter also make stipulations for the maintenance and withdrawal of funds[87] and accounts[88] of the school.[89] They also mandate that fees collected for specific purposes should be used only for that purpose[90] and that all necessary returns and documents are to be submitted in a prescribed manner to the Directorate of Education.[91]

Overall, the fee regulatory framework in Delhi appears to be a reasonable one, which prescribes best practices governing the area. However, against the backdrop of the absence of a specific fee regulation legislation, combined with Delhi's status as the hub of some of the biggest private schools in the country, fee hikes in private schools has often been a highly contentious matter, and has led to protracted litigation both in the High Court of Delhi and the Supreme Court of India.[92]

In response to a Public Interest Litigation (PIL) filed in 1997,[93] the High Court of Delhi had constituted another committee chaired by Justice Duggal in 1998. Pursuant to the recommendations of this Committee, the Delhi Government had ordered the formation of Fee Anomaly Committees in every district in 1999.[94] In a notice dated December 12, 2017, the Director of Education issued a notice to all the Deputy Directors of Education (Districts) reiterating that Fee Anomaly Committees were effective in every district and comprised of the Deputy Director of Education of the District concerned serving as the Chairperson; the Education Officer (Zone), or, in his absence, the Deputy Education Officer of the Zone concerned serving

as a member; and a Chartered Accountant nominated by the Director of Education serving as a member.[95] Parents can register their complaints against the school with the fee anomaly committee of the district with a Rs 100 processing fee charge.[96] The fee anomaly committee is to examine and verify the individual complaint registered within ninety days and submit its findings with the approval of the Director of Education.[97]

In response to another PIL filed in 2009,[98] the High Court of Delhi had constituted a three-member Committee chaired by Ret'd Chief Justice Anil Dev Singh of the Rajasthan High Court and comprising of a Chartered Accountant and a Ret'd Additional Director of Education, Delhi. The mandate of this Committee was to examine the records, funds and accounts of all private schools in the National Capital Territory that had increased their fees in response to the Sixth Pay Commission's recommendations, and determine whether the extent of fee hike by each school was justified.[99] The Committee, formally constituted on 23 September, 2011, released 22 voluminous reports between August 2012 and August 2017, examining the records of 1092 schools.[100] These reports recommended that 531 of the examined schools must refund excess fees charged from parents, with nine percent interest.[101] Apparently, over 500 of these schools are yet to refund about Rs 350 crores of total excess fees and the matter is currently mired in litigation, with the Government of Delhi threatening to de-recognize the defaulting schools and take over their management.[102] Private schools, on their part, are ready to take on the state government and have been alleging errors on the part of the Committee in its recommendations.[103]

Fee hikes in private schools to give effect to the recommendations of the Seventh Pay Commission were challenged before the High Court of Delhi too.[104] The Directorate of Education has ordered a stay on fee hikes and asked schools not to collect increased fees while the matter is sub-judice.[105]

The Delhi High Court had also ruled, in January 2016, that the State Government can directly regulate the fees

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[87] Delhi School Education Rules, 1973 rule 176
[88] Ibid., rule 175
[89] Ibid., rule 174
[90] Ibid., rule 177(3), 178
[91] Ibid., rule 180
[92] Roy Chowdhury 2017
[93] Delhi Abibhavak Mahasangh v. Union Of India And Ors., W.P. (C) 3723/1997 (Del HC, 1998)
[94] Directorate of Education, Government of National Capital Territory of Delhi 1999
[95] Directorate of Education, Government of National Capital Territory of Delhi 2017
[96] The Hindu 2017
[97] Directorate of Education, Government of National Capital Territory of Delhi 2017
[98] Delhi Abibhavak Mahasangh and Ors. v. Government of National Capital Territory of Delhi and Ors., W.P. (C) 7777/2009 (Del HC, 2011)
[99] Education Department (Act Branch), Government of National Capital Territory of Delhi 2011
[100] To see all volumes of these reports, please visit the website of the Directorate of Education, Government of NCT of Delhi. ("Interim Reports Submitted By Justice Anil Dev Singh Committee" 2018)
[101] PTI 2017
[102] Ibid.
[103] Roy Chowdhury 2017
[104] Miss Taru Chauhan through father Nitim Kumar Chauhan and Ors. v. Government of National Capital Territory of Delhi and Ors., W.P. (C) 11265/2017 (Del HC, 2018)
[105] Directorate of Education, Government of National Capital Territory of Delhi 2018

of schools built on Delhi Development Authority land.[106] This order was challenged before the Supreme Court of India, which rejected the appeal and confirmed the order, saying that such schools must seek approval from the state government before hiking their fee.[107] The barrage of litigations and the web of cascading orders from them have understandably led to a very uncertain regulatory regime for private schools' fee regulation in Delhi.

The Government of Delhi has tabled a Delhi School (Verification of Accounts and Refund of Excess Fee) Bill, 2015, which is modeled after the Tamil Nadu Fee Regulation legislation.[108] The Bill prefers an indirect approach by way of regulating the way fee is accounted for and utilized by private schools, rather than the amount or hike in fees. The Bill, however, is yet to be enacted, due to being rejected by the Union Government on ground of procedural lapses in the manner in which it was passed by the Legislative Assembly of Delhi.[109]

C. Maharashtra

The Maharashtra Educational Institutions (Regulation of Fee) Act, 2011, which came into force on 21st March 2014, doesn't attempt to fix the school fees through any state agency. Rather, it provides a viable method for stakeholders to engage with each other in order to mutually ascertain the fees in schools. Each schools' management is required to get their fee structure approved by an executive committee comprising parents and teachers, at least six months before the start of the new academic year.[110] If both fail to agree on the fees, the decision is forwarded to a Divisional Fee Regulatory Committee (DFRC).[111] The decision of the DFRC is final and binding on the schools in question for the next two academic years.[112] The only recourse against this decision is to appeal to the state level appellate body, the Revision Committee.[113] The decision of the Revision Committee is final and binding on the school in question for the next two academic years and there is no provision to appeal against the same provided in the Act.[114]

This statute seems to be a fairly comprehensive regulatory effort that encourages self-regulation by schools, involves both parents and teachers in approving the fees, as well as restricts the state's role to that of an adjudicator in case of

disagreements. The only unreasonable provision seems to be the power given to Education Officers directed by the Divisional Fee Regulatory Authorities to enter, search and inspect the premises of any school that they believe may be contravening the provisions of the Act.[115] Though, there have been no reports of misuse of this provision, it certainly has the scope of being misused in an arbitrary manner to terrorise school owners. On the contrary, reports suggest that schools are violating provisions of the statute by not giving parents prior notice or obtaining the approval of PTA executive committees before increasing the fees.[116]

Further, despite the statute coming into effect in 2014, the divisional committees were formed only in 2016 while the revision panel became operational in March 2017.[117] As a result of these inordinate delays, there are hundreds of fee disputes pending resolution at the divisional and state level. In May 2017, the Maharashtra Government issued a Government Resolution to review and amend the Act.[118]

D. Rajasthan

Rajasthan enacted the Rajasthan Schools (Regulation of Collection of Fee) Act in April 2013 to regulate fees in private schools. The Act constituted a state level fee-determination committee to fix the fees for every school and also adjudicate (or dismiss) complaints against itself. The fee fixed by the committee was made binding on the private school for the next three academic years. This statute proved to be very unpopular among private schools, threatening the very existence of thousands of them in the state, and ultimately being mired in litigation in the Supreme Court.[119]

The new legislation regulating fees, namely, the Rajasthan Schools (Regulation of Fee) Act, 2016 mentions that its predecessor was repealed owing to non inclusion of a provision of appeal against the orders of the Fee Determination Committee and the incapacity of a single fee determination committee to determine the fees of all schools in a proper manner in time.[120]

Most of the key provisions in this legislation are modeled on the Maharashtra Fee Regulation Act, including the process and bodies determining fees in every school.

[106] The Times of India 2016
[107] Sinha 2017
[108] Ranjan 2015
[109] The Indian Express 2016
[110] Maharashtra Educational Institutions (Regulation Of Fee) Act, 2011 s 6
[111] Ibid., s 6(4)
[112] Ibid., s 10(4)
[113] Ibid., s 6(7)
[114] Ibid., s 12
[115] Ibid., s 10(2)
[116] Pednekar 2017
[117] Ibid.
[118] The Asian Age 2017
[119] Santhosh 2014
[120] Rajasthan Schools (Regulation Of Fee) Act, 2016 Statement of Objects and Reasons

The Act specifies what factors the schools must look at in order to determine its fees while also maintaining the Maharashtra Act's arbitrary provision of enabling the entering, searching, and inspecting of the premises and documents of school owners.[121]

The only significant areas in which the new Rajasthan Act differs from the Maharashtra Act are the inclusion of representatives of parents and private schools in the divisional and state level committees,[122] and the provision for remuneration of the members of these committees.

However, the new statute has already run into severe opposition, with a petition being filed before the High Court of Rajasthan to review it on the grounds that it allegedly gives private schools a free hand to charge exorbitant fees.[123] The High Court has admitted the petition and issued a notice to the state government as of now.[124]

E. Gujarat

Enacted in 2017, the Gujarat Self-Financed Schools (Regulation of Fees) Act, 2017 instigated widespread backlash from private institutions that challenged the authority of the state to interfere with its fee policies. State attempts at regulation were being viewed as attempts to curb the autonomy of private schools to conduct themselves. Finding the regulatory move constitutional, the Gujarat High Court gave its verdict in favor of the state government to determine the fees laid down by private schools.[125] The move emanated from increasing demands by parents to curb seemingly exorbitant fee hikes that were perceived to characterize private school fee policies up to this point.

The Education Department of the Government of Gujarat set an upper limit on annual fees collected by the private schools at Rs 15,000, Rs 25,000 and Rs 27,000 for primary, middle and high school education respectively.[126] If schools wish to charge fees above these fee caps, they are required to submit an application for an increase in fee structures before one of the four zonal fee regulatory committees and justify the reasons for the hike before implementing them.[127]

According to P. K. Das, Secretary of Haryana School

Education, private school fees may be determined either by market forces such as land, infrastructure, services, quality of teachers, etc. or through micro-regulation i.e. capping of fees.[128] As such, Gujarat's experience with fee regulation provides an example of fee regulation through micro regulation. In fee cap models of regulation, fee hikes cease to remain the source of the problem, instead the limits placed by state intervention becomes the source of the problem.

Moreover, in light of the fact that the median fee for private unaided schools offering elementary education (2014-15) was Rs. 5700 annually in urban areas, and Rs. 4000 for rural areas.[129] Since the imposed fee caps are many times higher, they could conceivably lead to schools charging upto five times their original fees and thereby engage in profiteering, as long as it is within the prescribed fee cap limit. To that extent, Gujarat's fee regulation model actually promotes what it intended to remedy.

These fee cap measures have not only been criticized for state arbitrariness in regulating the conduct of private unaided institutions but also for discouraging entrepreneurial ventures into the sphere of education.

F. Karnataka

Karnataka's tryst with fee regulation was initially spurred by the need to curb increasing fees by colleges imparting post secondary education. Subsequent to the tabling of Karnataka Private Medical Establishments (Amendment) Bill 2017, the state eventually included private schools within its legislative ambit.[130] The Karnataka government recently implemented Amendment Act No. 25 of 2017 which lays down the penalty for non compliance with the norms specified in the Karnataka Education Act, 1983.[131] Schools failing to comply could be compelled to pay Rs 10 lakhs along with the refund of the excess fee charged.[132] The Amendment Act No. 25 of 2017 exempts educational institutions associated with the Council of Indian School Certificate Examination (ICSE) and Central Board of Secondary Education (CBSE), apart from certain provisions relating to safety norms and penalties.

The Act provides for District Education Regulatory Authorities to oversee the fee structures of private

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[121] Ibid., s 9(2)
[122] Ibid., ss 7, 10
[123] The Times of India 2017
[124] Ibid.
[125] Pathak 2017
[126] Education Department, Government of Gujarat 2017
[127] Gujarat Self Financed Schools (Regulation Of Fees) Act, 2017 s 14
[128] Sil 2017
[129] Kingdon 2017
[130] Kulkarni 2017
[131] The Karnataka Education (Second Amendment) Act, 2017
[132] Ibid., s 6

schools through a new formula that allows schools to hike their tuition fees (through imposing additional fees) by a margin that varies based on the school's location. The current fee structure allows schools to hike their fees by an additional 30% for recurring expenses,[133] excluding the expenditure incurred while paying teaching and non-teaching staff.

Fees determined by the District Education Regulatory Authority rely on a number of factors, namely: the location of the private school, the infrastructure made available to the students, the costs incurred by maintenance and administration of said private school, a "reasonable surplus" geared towards the continued growth and development of the private school and any other factor which the authority may deem fit.[134]

G. Andhra Pradesh

The Andhra Pradesh Self Financed Independent Schools (Establishment and Regulation Act), 2017, one of the most recent entrants into the state fee regulations arena, prescribes factors[135] that determine the fees charged by a particular school and includes two unique components of interest cost of investment and the impact of inflation.

The Act stipulates the yearly increase in school fees to be no more than 12 percent of the fee charged in the previous year for each class.[136] The regulatory framework established by the Act comprises two committees: the Zonal Fee Regulatory Committee[137] and the Revision Committee.[138] The Zonal Fee Regulatory Committee primarily takes decisions on proposals submitted by schools to increase fees beyond the permitted fee increase amount. Further, it also provides a platform for students or their parents to register complaints in the event of school fees being charged in excess of the prescribed amount. A Revision Committee has been set up which has the power to hear appeals against the decisions of the Zonal Fee Regulatory Committee and thus functions as a review body for settling disagreements. In case the increase in fee is not permitted at this stage, the differential fee is to be collected with interest, if any, and refunded.

While the Act makes a provision for the formation of Parent Teacher Association in each school,[139] this body is largely to serve as a general conduit of communication between the school management and the parents, without any specific focus on fee regulation.

The Act does not focus as much on punitive measures, as it does on corrective ones when there is a violation of its provisions by a given school. In contrast to fee regulation laws in other states that impose high penalties on schools that contravene the law, the Andhra Pradesh Act states that the appropriate authority should give an opportunity to the defiant school "for rectifying such defects or deficiencies, in terms of the rules prescribed hereunder".[140] It also provides a platform for schools to voice their version of events and present their arguments before any penalty is imposed- stating very clearly that no directions may be issued unless a reasonable opportunity of being heard is given to such eligible educational entity.

In this regard, the Andhra Pradesh Act is a step ahead of contemporary Acts in other states in the education space. Recently enacted, this Act awaits the reactions of the various stakeholders it is bound to affect: schools, parents and school children.

Comparative Analysis of the Approaches Towards Regulating Fees

As evinced by the snapshots in the previous section, there are some broad regulatory models that individual states follow within the domain of regulating private school fees in their state. Some regulations provide criteria to guide the fixation of fees by a statutory committee, such as in Karnataka and Tamil Nadu while others choose to put in place safeguards to prevent profiteering, such as in Delhi and Andhra Pradesh. Furthermore, some states, such as Maharashtra and Rajasthan, delegate the fixation of fees to school-level committees and instead establish dispute resolution committees to sort disagreements. Gujarat chooses to establish fixed fee ceilings in contrast to other states regulating fees.

There are similarities that run through the regulations in all the seven states. With the exception of Delhi, all states specify the factors based on which the fee structures may be determined by each school. Secondly, each of them prescribes, either expressly or by delegating to the designated authority, the heads under which fees may be charged by schools. Thirdly, all of them provide for a significant notice period of disclosure of hiked/revised fees at the beginning of the academic year to the designated authority. Further, all the fee regulations provide for some penalty, either in the form of fines or in some extreme

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[133] Ibid., s 6
[134] Ibid.
[135] Andhra Pradesh Self - Financed Independent Schools (Establishment And Regulation) Act, 2017 s 13(2)
[136] Ibid., s 13(1)
[137] Ibid., s 14
[138] Ibid., s 15
[139] Ibid., s 9
[140] Ibid., s 26

cases, even imprisonment, for the management of defaulting schools. However, perhaps keeping in mind the implication on the students in these schools, none of them prescribe de-recognition of defaulting schools.

A matter worth highlighting is the overwhelming usage of vague terms in these regulations. Most of the regulations that expressly lay out factors for determination of fee to be charged by schools, make use of such provisions as 'the education standard of the school as the State Government may prescribe', 'reasonable amount for yearly salary increments', 'reasonable surplus for qualitative development of students', 'reasonable surplus required for growth and development of school' or some variant thereof. On the one hand, it is understandable that these regulations cannot impose a uniform, one-size-fits-all standard for matters like salary increments and school development, and therefore provide flexibility to schools through the use of the term 'reasonable'. However, on the flip side, such ambiguous provisions vest immense discretionary power in the hands of the committees, and may very likely lead to excessive scrutiny and interference by the committee in the schools' expenditure as well as their decisions over what optional facilities or events to provide. This would have the effect of schools losing autonomy in these matters. For instance, a school may wish to levy a charge for conducting its Foundation Day, based on its estimate of the expenditure required for the event. However, the prescribed fee regulation committee may decide that this charge is unreasonable and strike it down, in effect forcing the school to lower its estimated expenditure for the event, or cancel the event altogether.

The Gujarat model seems prima facie invalid by virtue of setting a rigid fee structure, which is an unacceptable restriction on the autonomy of a private institution, without any consideration accorded to individual cases and therefore in violation of the rules set by the Supreme Court, as noted in Section II. Another prima facie illegal provision seems to be the search and seizure power given to District Committees by the regulations in Maharashtra and Rajasthan to enter and inspect private schools at any time. It bears noting that an analogous provision in the Tamil Nadu Fee Regulation Act was struck down on grounds of being patently arbitrary, by the High Court of Madras.[141]

We have culled out some desirable procedural best practices from the existing statutes that should be incorporated in all fee-regulating statutes. These provisions have been selected on the basis of their

reasonableness and supposed ease of implementation:

- **Preamble in the fee regulation statute.**

  The presence of a preamble helps demonstrate the need for such legislation as well as intent of the government on the subject in question, i.e. to combat commercialization, profiteering etc.[142] The fee regulation legislation in Karnataka and Maharashtra have preambles in place preceding the substantive provisions of the Acts. In the interest of providing context to aid interpretation of provisions in line with the legislative intent, the fee regulating statutes in all states must be accompanied by a clear preamble.

- **Presence of a judicial member in fee regulatory authority**

  Among the seven analyzed states, all except Rajasthan include a retired judge within their prescribed committees. The presence of a judicial officer in these committees is important since these authorities not only exercise adjudicatory functions, but are also vested with the power of a civil court for their investigation and decision-making. The chairmanship of a retired judicial officer legitimizes the exercise of such powers by the authority.

- **Presence of parents' representatives in fee regulatory authority**

  While Maharashtra and Rajasthan provide for school-level bodies comprising of, among others, parents' representatives that approve fees fixed by school managements, out of the seven fee regulations studied, only Rajasthan's provides for parents' representatives in the fee regulatory authorities, at both the divisional and state levels. Since parents are one of the primary stakeholders that these fee regulations are meant to benefit, they must be represented in all the authorities established by them at the divisional/district/state levels.

- **Presence of private schools' representatives in fee regulatory authority**

  Private schools are the primary stakeholders that could be adversely affected by regulation imposed by states on their ability to determine their own fees. With a threat of their operational autonomy being breached by these regulations, they must be

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141   Tamil Nadu Nursery Matriculation and Higher Secondary Schools Association (Regd.) rep. by its General Secretary Mr. K.R. Nandakumar and Ors. v. The State of Tamil Nadu rep. by the Principal Secretary, Department of School Education and Ors. & allied petitions, W.P. (C) 627, 815, 850, 851, 852, 854, 855, 1105, 1269, 2833, 3620 & 112 of 2010 (Mad HC, 2010)

142   Maharashtra Educational Institutions (Regulation Of Fee) Act, 2011 Preamble

adequately represented at the district/divisional/state level authorities too. Among the seven analyzed states, only Andhra Pradesh, Gujarat, and Rajasthan provide for such representation for private school representatives.

- **Presence of an accountant in the fee regulatory authority**

  The fee regulations in Maharashtra, Rajasthan, Andhra Pradesh, Gujarat and Delhi provide for either a Chartered Accountant, or a Treasury Officer, or a representative of the State Accountant General, as a member of their respective prescribed fee regulatory bodies. Since these authorities have to adjudicate or decide on the fee to be charged by schools, which involves the examination of detailed accounts and budgets, it should be mandatory to include a professionally qualified accountant in these bodies, who would be able to ascertain the veracity of accounts and advice on technical aspects of balance sheets and audit reports by the schools. This step could seriously empower the decision-making ability and efficiency of the committees in settling disputes and performing their determination functions in a time-bound manner.

- **Provision for emoluments for members of the prescribed fee regulatory authority**

  The fee regulations in Gujarat, Tamil Nadu and Rajasthan provide rules for emoluments to be made to some or all members of the fee regulatory committee. This is vital so as to ensure that the members are provided with incentives to function in an efficient manner. The provision of the same also helps in estimating the financial implications of setting up such committees, which would not only be of practical value to the state exchequer, but also in the interest of transparency, impartiality and accountability of its members.

Overall, we could deduce that too much regulation can take away from operational autonomy of schools while too little regulation can lead to the litigation quagmire resulting from a few schools engaging in unscrupulous increases of its fees against the interests of their beneficiaries. In both cases, parents as well as the school-owners are adversely affected because of the ensuing uncertain regulatory regime. Therefore, states regulating fees must consider the nature of private schools within their territories and the real data behind a demand for regulation, whether through average rates of fee hikes over the last few years or total enrollment

numbers in private schools, before they unilaterally enact legislations that could jeopardize the future of education for millions of children.

The Cost of Regulation and Intervention

This section concludes the analysis by looking at two significant yet overlooked aspects of these fee regulations: the cost, and the workload they place on the fee regulatory authorities they create.

Estimates of Cost of Committees

A critical aspect of fee regulation is the cost incurred by the government for enforcement of such regulations and also, the ability/capacity of the state-level committees to determine the fee for every private school on an annual basis.

There are two aspects of the cost: first, that incurred by the states for enforcement, and second, the cost born by private schools to comply. In an ideal scenario, the cost of regulation is matched with its benefits. In the absence of publicly available data on compensations, allowances and other expenses, it is difficult to determine the exact cost. However, estimates can be drawn using clues from some of the fee regulations. The Rajasthan Act, for example, in its Financial Memorandum, provides for a sitting allowance of Rs 500 per sitting for the nominated representatives of parents and private schools in the Divisional Fee Regulatory and Revision Committees.[143] Given that there are seven Divisional Fee Regulatory Committees in Rajasthan, assuming 15 sittings in a year and an average cost of Rs 2000 per sitting (considering there are two parents and two school representatives in a committee), the total cost of only the nominated members will be Rs 2,10,000 per annum.

A more comprehensive estimate is available in The Delhi School (Verification of Accounts and Refund of Excess Fee) Bill, 2015. The financial memorandum, not considering the cost of office space for the committee, lays out the total recurring annual expenditure on account of salaries of the Chairperson, members, officers and employees of the Committee to be approximately Rs 2.5 Crores per annum.[144]

Estimates of Workload of the Committees

The issue of the workload of each committee that attempts to decide the fee for each private school on an annual

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143 Rajasthan Schools (Regulation Of Fee) Act, 2016 Financial Memorandum
144 Delhi School (Verification Of Accounts And Refund Of Excess Fee) Bill, 2015 Financial Memorandum

basis should requires attention. It is interesting to look at the estimated workload of some of the committees constituted under these Acts, considering their vast jurisdictions and the large number of private schools in these states. Let us consider the example of the state of Tamil Nadu.

The total number of private schools in Tamil Nadu, as of 2015-16, is 10,946. Assuming the fee structure of one-third of that number is reviewed and set each year (since each school's fee structure is set once every three years), it follows that 3,648 private schools are reviewed by the Tamil Nadu Private Schools Fee Determination Committee annually. This is no ordinary task considering the composition of the committee where except the Chairman (who may or may not have a full-time work position), the rest of the members have full-time work positions outside the Committee.

The Tamil Nadu Fee Determination Committee consists of six individuals. Assuming that each of these members devotes seven hours to their committee duties each day, and that too without any leave of absence, the Committee will end up totaling 42 hours of work each day.

Now, let's make a conservative estimate that the review and fixing of the fee structure for each school, which will include the perusal of their accounts, documents outlining plans and projected expenses for the next three years, other particulars, as well as hearing school management representatives, takes seven hours. It would therefore take 25,536 hours to review and fix the fee structures for 3,648 schools.

Since we have estimated that the committee can put in 42 cumulative hours of work each day, the committee would be able to finish its mandate of determining fee structures for these 3,648 schools within an estimated period of 608 days. By our calculations, it would take approximately 2.5 years for this committee to review

3,648 cases while operating at 7 hours per member within 243 working days a year. While the Fee Regulation Act and its Rules do not prescribe any time period within which the Committee is supposed to set fees for schools, it is clearly not possible to finish this work for a third of private schools in Tamil Nadu each year.

Using the very same formula, we can approximate the number of working days taken by fee regulation committees in each of the other six states, based on the following assumptions:

• that the committee hears cases from one third of the total schools within its jurisdiction in a single year

• that the total number of private schools in a state are divided approximately equally within its districts/zones/divisions

Hence, the annual workload of these committees (which, it must be reiterated, comprise of members with full-time jobs) as per our calculations, ranges from 12 days for Fee Anomaly Committee in Delhi to 254 days for the Divisional Fee Regulatory Committee in Rajasthan. However, a more realistic picture of the committees' workload can be demonstrated by looking at the Justice Anil Dev Singh Committee in Delhi, which took six full years to study all 1092 schools in Delhi.

These costs reflect the enormous task present before the fee regulation committees. In absence of sufficient resources, creating such committees that take away the decision of fee charged by a school away from parents and schools may further the corrupt practices in the sector without truly resolving the challenge. With these outstanding issues, numerous amendments to the Acts still pending approval and the fate of many state fee regulations hanging in the balance before the judiciary, it remains to be seen how the story of private school fee regulation plays out in India over the next few years.

Table 8: Estimated number of days taken by a committee to examine/set fee for schools

State	No. of state committees (a)	No. of members in each committee (b)	No. of work hours in a day (7xb)	No. of schools in state (c)[145]	No. of schools within jurisdiction (d = c/a)	No. of schools whose fee determined (e = d/3)	No. of hours required for all schools (7xe)	No. of working days required from committee (e/b)
Andhra Pradesh	50[146]	5	35	25,129	503	168	1,176	34
Delhi	11	3	21	1,187	108	36	252	12
Gujarat	4	5	35	9,418	2,354	785	5,495	157
Karnataka	30	5	35	13,063	435	145	1,015	29
Maharashtra	8	5	35	12,737	1,592	531	3,717	106
Rajasthan	7	7	49	37,267	5,324	1,775	12,425	254
Tamil Nadu	1	6	42	10,946	10,946	3,648	25,536	608

[145] For all states except Delhi, see Kingdon 2017. For Delhi, visit the website of the Directorate of Education, Government of NCT of Delhi ("List Of Public Schools Recognised By DOE" 2014).
[146] Since the number of educational zones in Andhra Pradesh is not publicly available, we are substituting the number of revenue divisions in the state here.

FEE REGULATION COMPARATIVE MATRIX

STATES	Tamil Nadu	Rajasthan	Maharashtra	Karnataka	Delhi	Gujarat	Andhra Pradesh
Is regulation based on certain parameters?	Yes	Yes	Yes	Yes	No	Yes	Yes
Is there a fee regulation committee at the school level?	No	Yes, School Level Fee Committee	Yes, Parent-Teacher Association (PTA) Executive Committee	No	No	No	No
What are the functions of this school level committee?	NA	Determine and approve the fee proposed by a school	Approve the fee proposed by the school	NA	NA	NA	NA
What is the constitution of the school level committee?	NA	- Chairperson: Representative of private school management - Secretary: Principal of the school - Members: Three teachers, and five parents	- Chairperson: Principal or Head Master - Vice-chairperson: Parent representative - Secretary: Teacher representative - Joint Secretary: Two parent representatives - Members: One parent and one teacher from every standard	NA	NA	NA	NA
Is there a fee regulation committee at the district level?	No	No	No	Yes, District Level Education Regulating Authority	Yes, Fee Anomaly Committee	No	No
What are the functions of this district level committee?	NA	NA	NA	Address parents' complaints regarding fee collection	Examine grievances raised by parents against the fee charged	NA	NA
What is the constitution of the district level committee?	NA	NA	NA	- Chairperson: Deputy Commissioner (DC) of District - CEO Zilla Panchayat - Executive Engineer - Deputy Director Pre-Uni Edu, Dept of the District - Deputy Director of Public Instruction of the District	- Chairperson: Deputy Director of Edu in District - Edu Officer (zone) or Deputy Edu Officer (zone) - Chartered Accountant (CA) nominated by the Director of Edu	NA	NA
Is there a fee regulation committee at the Zonal/Divisional level?	No	Yes, Divisional Fee Regulatory Committee	Yes, Divisional Fee Regulatory Committee	No	No	Yes, Fee Regulatory Committee	Yes, Zonal Fee Regulatory Committee
What are the functions of the Zonal/Divisional level?	NA	Adjudicate disputes between school management and PTA and determine the fee in case of no reconciliation	Adjudicate disputes between school management and PTA and determine the fee in case of no reconciliation	NA	NA	- Verify, approve and set the fee charged - Hear complaints or take suo moto action against schools that charge excess fee	- Approve fee increase beyond the annual permitted percentage increase - Address parental grievances against fee charged
What is the constitution of the Zonal/Divisional level committee?	NA	- Chairperson: Divisional Commissioner - Deputy Director, Secondary Edu - Nominee of Director Sanskrit Edu - Treasury Officer of District Treasury situated at Revenue District HQ - Deputy Director, Elem Edu (Ex-officio Member - Secretary) - Two representatives of the pvt school nominated by Divisional Commissioner - Two representatives of parents nominated by Divisional Commissioner	- Chairperson: Retired District Judge - Divisional Chairman of Maharashtra State Board of Secondary and Higher Secondary Edu - CA or Costs and Works Accountant - Retired head of CBSE or ICSE or any other Board, or any retd officer not below rank of Joint Director of Edu of Govt - Regional Deputy Director of Edu	NA	NA	- Retired District and Sessions Judge or retired member of All India Service not below the rank of Principal Secretary or retired member of IPS not below the rank of Additional Director General of Police (Chairperson) - CA - Civil Engineer or govt approved valuer - Representative of self-financed School Management - Reputed academician	- Chairperson: Retired District Judge; - Representative of State Accountant General at District level - An eminent person - An eminent retired head of a self-financed independent institution - Representative of the Department of Edu not below the rank of District Education Officer

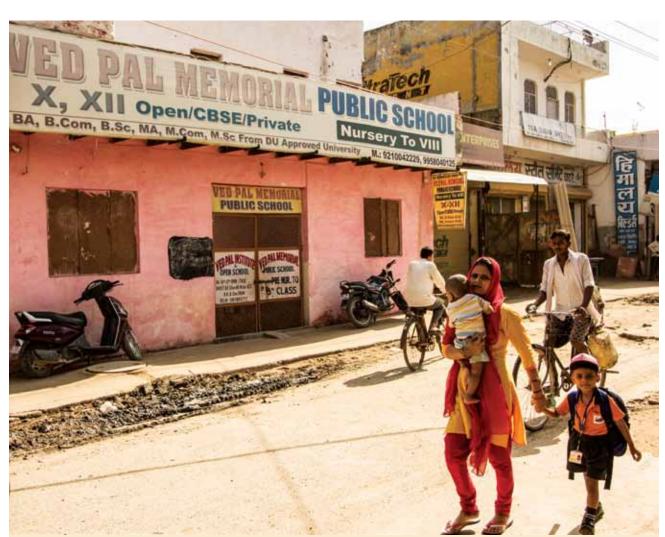| STATES	Tamil Nadu	Rajasthan	Maharashtra	Karnataka	Delhi	Gujarat	Andhra Pradesh
Is there a fee regulation committee at the State level?	Yes	Yes	Yes	No	No	No	Yes
What are the functions of the state level committee?	• To determine fee for schools • To address complaints regarding collection of fee charged in excess of the fee determined by it or fixed by the government	Functions as an appellate forum for those aggrieved by decisions of the Divisional Fee Regulatory Committee	Functions as an appellate forum for those aggrieved by decisions of the Divisional Fee Regulatory Committee	NA	NA	NA	Functions as an appellate forum for those aggrieved by decisions of the Zonal Fee Regulatory Committee
What is the constitution of the state level committee?	- Chairperson: Retired High Court Judge - Director of School Edu - Director of Matric Schools - Director of Elem Edu - Joint Chief Engineer (Buildings) Public Works Department - Secretary: Additional Secretary to Govt, School Edu Department	- Chairperson: Secretary in charge of Department of Elem Edu - Secretary in charge of Department of Secondary Edu or his nominee - Commissioner/Director of Secondary Edu Dept - Commissioner/Director of Elem Edu Dept - Commissioner/Director of Sanskrit Edu - Two representatives of pvt schools - Two representatives of parents - Accounts Officer of the Education Dept - Senior Deputy Secretary (Ex-officio member)	- Chairperson: Retired High Court judge nominated by the govt in consultation with High Court - Retired person holding the post of Director of Edu (or its equivalent) or a retired head of CBSE or ICSE (or such other boards) - CA or Costs and Works Accountant - Joint Director of Edu (Secondary and Higher Secondary)	NA	NA	NA	- Chairperson: Retired High Court Judge - Secretary or Principal Secretary of Department of Edu - Representative of State Accountant General - An eminent retired head of a self-financed institution - An eminent person, to be nominated by the govt
What is limit on fee charged?	No	No	No	Yes; increase upto (Salaries + 30% for overhead)/ Student Strength	No	Yes; upper limit of Rs 15,000 for pre-primary and primary schools, Rs 25,000 for secondary and higher secondary schools (general stream) and Rs 27,000 for higher secondary schools (Science)	Yes; annual increase upto 12% of the fee charged in the previous year
Is there an agency empowered to enter and inspect schools without notice?	No	Yes	Yes	No	No	No	No
Penalty in case of non-complaince	- Imprisonment for a term between three to seven years, and fine upto Rs 5,000 - Refund of excess fee to pupils	- For first offence, a fine between Rs 50,000 and 2,00,000, or twice the amount taken in excess of approved fee, whichever is higher. For subsequent offences, a fine of at least 2,00,000, or twice the amount taken in excess of approved fee, whichever is higher. - Refund of excess fee to pupils - Repeated offendors shall be ineligible for holding official post in any school management	- For first offence, fine of between Rs 1-5,00,000, or twice the amount of excess fee, whichever is higher. For subsequent offence, fine between Rs 2-10,00,000 or twice the amount of excess fee, or imprisonment between 3-6 months - Refund of excess fee to pupils - Repeated offendors shall be ineligible for holding official post in any school management	- Fine upto Rs 10,00,000 - Refund of excess fee to pupils	- Refund of excess fee to pupils with 9% interest, failing which the school will face derecognition and the management will be taken over by the Directorate of Education	- For first offence, fine of upto Rs 5,00,000. For second offence, fine between Rs 5-10,00,000. For third offence, de-recognition of school - Refund of twice of excess fee to pupils within 15 days from receipt of order	Directions to be issued by the appropriate authority. In case these directions are not complied with, penalty may be imposed as prescribed. Repeated contravention of such directions may result in derecognition of the school
Estimated number of full working days to be taken by fee regulatory committees to examine/ set fees for schools	608	254	106	29	12	157	34

An Unauthorised West Delhi Colony and its 100 Private Schools

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It's not hard to spot private schools these days, whether you are passing through metros, small towns or even rural areas. However, how do you explain the presence of more than 100 such schools in Hastsal—an area of less than 7 square kilometres?

Hastsal, a small census town in west Delhi, lies comfortably hidden between the massive Najafgarh drain on one side and the crowded Uttam Nagar bus terminal on the other. With its narrow and uneven roads and a curious mix of establishments, Hastsal is quite unlike the other more visible parts of the city. Once inside the place, you will be overwhelmed by the number of shops, schools, clinics, coaching centres, marriage gardens and of course houses, all of which seem to exist together, with no clear boundaries to separate one type from the other. The addresses of the buildings are in reference to the *gali* (lane) number they are located in, and you are likely to come across cases of three adjacent buildings sharing the same house number.

Once a small village surrounded by vast agricultural lands, today Hastsal is an agglomeration of several regularised–unauthorised colonies along with the Laaldora region of the older Hastsal Village, linked together by intersecting lanes and by-lanes. Among many other things, one thing that makes this place different from other parts of the city is the presence of a large number of diverse, but mostly low-cost private schools. Schools with names like 'Ideal Radiant', 'Star Shine', 'Kirti Public' and 'Pioneer Kamal' mark the landscape of the place, not just with their many coloured buildings; but also in forms of faraway walls painted with their names, the high flying banners that hang overhead, and flex boards tied to electric poles. Even if you miss seeing these schools, you

will not miss their presence which seems to be displayed on every corner, on every wall.

While nobody knows the exact number of such schools, when asked, Mr Naresh Tyagi, a long time social worker and founder of the 27-year-old 'The New Age Public School', believes that there are more than 100 such private schools in Hastsal today. Another school founder, Mr Satish Tyagi, quotes a presence of at least 200 private schools in Hastsal ranging from pre-primary ones to schools running up till standard 12. These schools are spread out in an area of less than 7 square kilometres and cater to a population of 1,76,877 (as per the 2011 census). However, locals guess that at least 5 lakh people live in Hastsal today. The corresponding figure for government schools in the area is 13, according to District Information System for Education (DISE) 2015-16.

The town today provides shelter, and often a means of livelihood to the migrant population from neighbouring states of Uttar Pradesh, Bihar and Haryana. And the majority of this population falls in the strata of lower or lower middle class. The question then arises: how did so many schools—firstly, emerge and then, flourish? And what does it really mean—is it simply a reflection of the aspirations of the working class, to equip its children to survive and thrive in the competition that characterises the society today? Or is there something more to this story?

From a Village to an Unauthorised Colony

The emergence of these schools is, in fact, deeply linked to the emergence of the colony itself. 61-year-old Umesh Tyagi, who has lived in Hastsal since his birth, and who now manages the Rajdhani Public School in the area, says that he was born in a village surrounded by vast agricultural lands, and has seen the neighbouring posher areas of Vikaspuri, Janakpuri and Uttam Nagar grow from wilderness to what they are today. 'We lived in kuchcha houses then, fenced by small rocks and thorns,' Mr Rati Ram Yadav, a retired Delhi police officer, and a native of the area adds.

However, the landowners sold off their agricultural land illegally to individuals. It was illegal because, under the Delhi Land Reforms Act of 1954, agricultural land cannot be sold off for non-agricultural uses. Gautumn Bhan tells the rest of the story about the transformation of agricultural land into unauthorised colonies in his research paper 'Planned Illegalities: Housing and the Failure of Planning in Delhi 1947-2010': 'Rural land belonged either to individual farmers or was common land in the village and belonged to the gram sabha or village council. Most unauthorised colonies get created when a person buys land—let us call him an "aggregator"—from either individual farmers or the gram sabha and aggregated into the size of a colony that could be large enough to hold as many 200 units or as few as 10. This aggregated land is then divided into plots and sold with written contractual agreements that detail monthly instalments and payment schedules undertaken and completed by individual house owners.'

Umeshji claims that this was done mostly to make a profit before the Delhi Land Reforms Act 1954 forced landowners to give up their possession for almost nothing. Another version comes from Mr Satish Tyagi, the owner of one of the earliest schools to come up in the area—the 'Vrindawan Public School', who says that this land was sold off during the time Delhi Development Authority (DDA) was acquiring land for the planned development of Delhi. The government was paying prices much lower than prevailing market prices, and the fear of acquisition at such low prices made the landowners sell off their land to these aggregators or 'colonisers' (as he ironically calls them). As a result, the settlement that followed was scattered and haphazard, explaining the maze of lanes and crossroads that define Hastsal today.

'This was the time when property dealers emerged in almost every house', Mr Satish Tyagi recalls. You will see the remnants of this even today in the busy streets of Hastsal. A large number of people shifted to Delhi seeking employment, and as the housing facilities in the city remained inadequate, the population in Hastsal, which provided relatively cheaper housing facilities, rose exponentially from 1980.

Lack of Public Provision of Facilities and Emergence of Private Schools

However, facilities available to serve the needs of this population were largely lacking. Till 1985 there was only one government school up-to the eighth standard,

and another managed by an NGO. A few early private schools began emerging around 1987 as a natural response to the rise in demand for schools by an ever increasing population. 'Plus, there was no land to work on anymore, they had to either find employment or generate employment for themselves, and opening schools seemed like a viable option', Mr Naresh Tyagi, the manager of 'The New Age Public School' says. He takes out an old file with a pile of yellowed sheets of letters and newspaper clippings—these are the applications he submitted to government over the years, due to which the government school was upgraded from upper primary to secondary level in 1994. Another application was submitted to DDA to allot land to open more schools. "However, the officials responded by saying that they had neither the land nor the budget to open these schools, given that it was an unauthorised colony. Instead they suggested that we should open our own schools—we had the land and the need for it." Mr Umesh Tyagi recollects. He also vaguely mentions an education secretary who visited the area under the Education for All campaign and motivated them to open their own schools.

Most of these schools were then established between the 90s and 2010. Mr Satish Tyagi, when asked about his motivation to start a school, says: 'I started teaching tuitions when I completely ran out of money. That helped me gain confidence that I could teach. Moreover, each time I would pass one of the schools and see people less educated than myself teaching these kids, I would think why not me. I had the land, I was educated, and I could teach.'

In case of Naresh Tyagi, his uncle who was already running his school in the neighbouring area instigated him to open one on his vacant land. 'I was in social work, and there was a definite scarcity of schools,' says Naresh Tyagi, in a matter-of-fact tone. This, however, does not mean he was running his school for charitable purposes. A monthly fee of Rs1000 has to be paid each month to study in his school 'but other than EWS, we do provide relaxation to children who may need it'—he gives an

example of a girl whose father died and whose fee was waived off for the entire session.

At 'St. Sai Public School'—a primary school in the area, they talk about starting with a small tuition and day-carecentre where children were charged only Rs 35 per month.

These schools which then came up served two important social functions—firstly, providing education to the children of Hastsal who otherwise didn't have enough schools to study in; and providing a means of employment to the adults of the area who at least had some degree of education.

Parent's Speak

Parents, when asked, show an apparent inclination towards sending their children to private schools over government schools. Lallan, who drives a cab, and has lived in Hastsal since 1995, sends his older sons to government schools, while his daughter who is in 3rd standard, goes to 'Greenland Public School' in the neighbourhood. However, his two sons too completed early years of their schooling from private institutes, before they shifted to government schools. He may do the same for his daughter later, he says. 'It is not easy to afford private education, especially in later years. But if they study a few years in a private school, they learn better, at least they are much better off than children who have always gone to government schools,' he says.

In a single storey building in adjacent Mohan Garden, four families live in separate rooms, sharing a large courtyard and bathing space. All of them have migrated from Bihar at different times. Sunita, whose husband is a *Rajmistri* (expert mason), has four children, all of who study in government schools. 'I did send my eldest daughter to a private school for two years but the fee was so high that we couldn't afford it anymore,' she says. If they could afford the fee? '*Fir to private mein hi bhejte na* (then, of course, we would have sent them to private schools),' she says. 'My daughter who is in 4th standard still struggles to read her textbooks,' she explains, when asked the reason.

Inside the expansive South Delhi Municipal Corporation (SDMC) School in Shiv Vihar, a group of helping staff sits in an otherwise empty building. Except for the woman whose sons are in their senior secondary year and go to a government school, and two men who are unmarried, all of the other four parents send their children to different private schools. 'We work here, and we know how things are run here. Moreover, whoever has some money, tries to send their children to a private school. It's like a trend now.' The man who works as the peon in the school and whose daughter studies in a bigger private school under EWS quota of Right to Education Act says, "It is true—while sending children to private schools is about the quality of education delivery; it is also as much about status now. There is a sense of pride that people feel in paying for the services they avail."

A Boost to Female Education

'There is another thing that happened with the emergence of these schools,' Mr Umesh Tyagi tells, as he puts his pen down on the table, 'more and more girls began going to school.' Parents, who were earlier apprehensive of sending their daughters to long 'unsafe' distances to study, began sending them to the nearby private schools. Om Prakash Rathore, who migrated from Uttar Pradesh in 1979 and now owns a flour mill in Hastsal, sent his daughter to the 'Rashtra Shakti Vidyalaya'—the earliest non-government school to emerge in the area, while his son went to the government school. When asked the reason for this surprising difference, he says, 'I could afford private education for only one of them, and while my son could go to a faraway government school, we preferred our daughter to go somewhere nearer,' he says, nodding.

Filling a Lacuna

The schools in the area are many and diverse—some bigger, others smaller, some with their own football grounds and yellow buses, and others which run out of residential buildings; a school operating from two buildings separated by a road; schools where children run home every time their bottles run out of water, and schools with classrooms which are technology enabled; schools where children interact openly and freely in their classrooms, and schools where children sit in complete silence in the presence of teacher- schools which are recognised and schools which are unrecognised and; schools, all of which are 'English Medium'.

However, these schools cater to different economic classes and are filling a glaring lacuna. As Naresh Tyagi puts it: 'it's these private schools that are currently carrying the responsibility of educating the children of Hastsal, because government schools are simply not sufficient.'

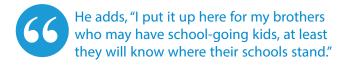*This article was first published in Outlook India.*

What if we Scrored Schools? Notes from a Centre for Civil Society Experiment in Delhi

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The schools are rated against 8 themes—infrastructure, teaching quality, school management, relations with parents, holistic development, discipline, and value education, and value for money.

An A2 size sheet is stuck with bits of black electric tape on the wall of a one-room salon in Shiv Vihar, West Delhi. The sheet which is displayed right next to the mirror lists 36 low-cost private schools in the area and around. Across these names are small coloured circles which inform the reader of scores of each of these schools under eight themes—infrastructure, teaching quality, school management, relations with parents, holistic development, discipline, and value education, and lastly, value for money.

The owner and the chief hairdresser at the salon says, "I saw the Sandhi Jankari Patrika for the first time a few weeks ago when two young students walked into my shop and explained to me how to read it. But I am not very educated, and I don't have young children."

> He adds, "I put it up here for my brothers who may have school-going kids, at least they will know where their schools stand."

The Sandhi Jankari Patrika (Sandhi Information Sheet) displayed in the salon is the culmination of months of extensive data collected from these 36 schools through surveys, student assessments and observations under the research study Sandhi. The study is being conducted by the Centre for Civil Society, a Delhi-based think tank and curator of the school choice campaign[147] in the country.

The Power of Information

The project takes inspiration from Learning and Educational Achievements in Pakistan Schools (LEAPS), a six-year-long research study, conducted by three economists, Tahir Andrabi, Jishnu Das and Asim Khwaja and funded by World Bank.[147] The study which involved providing information to parents on the performance of the schools and students in their village, recorded a 42% rise in learning outcomes and 17% reduction in private tuition fee of private schools in these areas when compared with parts where no such information was provided.

In their article 'The Power Of Information In Improving School Performance,' the authors state— "Providing information to citizens can improve services for the poor, swiftly and at relatively low cost. That, encouragingly, is the lesson emerging from recent experiments in Uganda, India, and Indonesia as well as observational research in the US in sectors as diverse as health, voting behaviour, access to subsidised food and education."[149]

Taking a cue from these findings and in the context of the Indian low-income urban reality, Sandhi aims to answer questions like—*Does access to objective, unbiased information empower parents to choose schools differently? What will be the implications of this empowered decision-making, on the way schools behave?*

Reaction of the Community

It has been an exhausting six weeks for community volunteers who have been engaged in reaching out to people with the Information Sheet. They sometimes travelled on e-rickshaws which played loud audio snippets to catch the attention of the passers-by, stood in busy weekly markets, visited the streets on foot and also rang doorbells of unknown houses to hand the owners the Patrika and teach them how to read it.

> But it has been a rewarding experience for many of them. 19-year-old Gulshan, a volunteer, says, "I have learnt how to approach different people differently, and then it felt purposeful, like I was contributing towards something bigger."

Reaching out to more than 20,000 people directly, however, was not always a pleasant experience for these volunteers. Some people were unwilling to stop and hear them out

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[147] www.schoolchoice.in

[148] Andrabi, Das and Khwaja 2017

[149] Andrabi, Das and Khwaja, The power of information in improving school performance 2017

and were dismissive of the entire initiative. However, such responses were more exceptions than rules.

"I didn't know there were so many schools here, where can I find their addresses and phone numbers?" a woman enquired. A majority of the people, as volunteers recount, showed an appreciation for the initiative, recognising it as a much-needed intervention. A large number of parents took this opportunity to vent out their distress related to schools—both private and government. Poor teaching quality, unreasonable fee hikes, poor facilities were common cries of these parents. "This should happen everywhere where there are schools, why just here?" a young man commented after one of the volunteers finished explaining the sheet to him.

But the most common question that parents raised—some to express their helplessness, and others as a genuine query was—"What can we do about it? *Humare akele bolne se kya hoga?* (Nothing will change if we speak up alone)," and some even demanded that the organisation intervene to bring the desired change in these schools.

However, in one of the community meetings a woman makes a passing comment, "the principal of Aradhana Public School (name changed for privacy concerns) refuses to acknowledge the Patrika." Did you take it to the school? The intrigued facilitator asks her. "Twice" she replies. "My husband and I went to the school and enquired about the scores. Initially, the principal dismissed it by saying that he has nothing to do with it. However, when my husband persisted, he begged us to stop creating a ruckus. 'Your child will pass out next year as it is,' he said."

Another woman who manages a garment shop in the morning and tutors primary school students in the evening informs that she has gone through the sheet thoroughly.

"I was surprised! A lot of parents come to me seeking advice about good schools, and the sheet makes me think that I have been making wrong recommendations all this while" she reflects.

On the other hand, parents whose children attend government schools and citizens who were concerned with "how things are" demanded that the sheet provide information on government schools as well. "Teachers are least concerned, students are most misbehaved, and at least half the children of this area attend government schools. This makes it all the more important." Mahesh (name changed) who runs a coaching institute in the area asserts.

At this stage, it is only possible to assume the nature of shift this may cause in the educational landscape of Hastsal and its surrounding areas. As one woman in the community meeting commented, "this is important, but doing it as a one-time activity will change nothing." However, the receptiveness shown by the community to the concept of informed school choice gives one reason to be hopeful.

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Conclusion to the Report

As experts at the central and state level debate education reforms, millions of children go through years of primary education without achieving grade-appropriate learning outcomes. This Report looks at the BPS that cater to the economically weaker households and suggests reforms and covers innovations relevant to advance the quality of education.

Private edupreneurs bring a unique quality: the ability to customise their approach to suit the needs of the community and to adapt to the operational challenges of the region with greater autonomy as compared to government schools that are often restricted by the superstructure that governs them. For instance, government schools in tribal areas often struggle with a teacher shortage, but private schools hire and train local teachers, serving both as a means of livelihood for the community and upliftment of the students.

There are several constraints and challenges that BPS face as institutions including hostile regulation and financial uncertainty. Unrecognised BPS exist in the extra-legal space facing threats of closure from the government, although they derive their legitimacy from parents who choose the schools for their kids.

The BPS segment has differentiated schools that vary by the fee charged, quality offered, pedagogy, infrastructure, and ownership. In Section one, through interviews with eight school leaders, we get a glimpse of how the schools vary in intention, vision and its manifestation. Despite the financial, infrastructural and intellectual constraints, some schools have developed innovative techniques to tackle with issues of quality through low-cost interventions such as the GyanShala model. The Report provides a summary of such models and an overview of schools that have adopted them in part or entirely.

Quality is a function of content (curriculum and teaching resources), teacher competence, assessment, and the overall school environment. Section two explores the trending innovations in each of these; for instance, there is increased digitalisation through the development of societal platforms that provide access to content for students and teachers. There is an attempt to bring together the stakeholders of education, individual and institutional, and make available the best of resources to everyone. The NTP, EkStep, and Diksha are some such examples. However, such projects are at a nascent stage, and we are yet to see a substantial impact on learning outcomes. CENTA conducts teachers' Olympiad to

resolve the issue of untrained teachers, through assisting teachers to build competence. It offers a flexible means to attain certification, and at the same time, extends the opportunity for career mobility. Another challenge is a lack of clarity on the purpose of assessment; it is not a means for corrective action but just to take stock of a student's learning. Technological solutions such as Mindspark, IMAX and XAMCHECK fill in this gap by enabling personalised learning and assessment. While these solutions focus on one aspect, interventions such as by Mantra4Change look at school transformation at multiple levels. It would be good to contextualise these narratives or profiles in more robust accounting of the ed-space in India, or its challenges and limitations.

The education space is ripe with innovations, however, as BPS operate as small individual units, many of these innovations are not adopted at scale. Moreover, the tools have to be looked at critically from the lens of affordability, and feasibility; for instance, schools in rural areas may not have access to electricity and thus may not be able to adopt such solutions.

There are several organisations that have taken an ecosystem approach, and create means for sustainable change in schools. For instance, GMC explores innovative financing models and is working with NISA to create a quality charter that allows schools to self-assess and identify areas of change.

Lack of access to quality preschooling often puts students from backward communities at a disadvantage. A few firms are working passionately in this space, such as Hippocampus, Wings, Sudiksha and Think Zone, to make quality and affordable preschools available in rural areas.

Within BPS, budget and infrastructural constraints often restrict schools to only curricular activities. Some of the players that are helping change this include AntHill Creations that focuses on creating playgrounds from waste scrap and old tyres, AddressHealth that works in the areas of physical and mental health and GyanLab that nurtures creativity.

Funding is critical to innovation. A significant amount of private investments today are directed to education technology, and preschools, as these areas face less stringent regulations. Some of the ways to resolve funding gaps include the implementation of a school voucher system that increases parental choice and also, improves a schools' capability to invest in the areas that matter. A

balanced approach to fee regulation, which promotes collaboration between parents and school management, without unnecessary government intervention is also critical to not discourage entry of new schools.

This Report is an urge, and a means for the stakeholders of education to understand the various challenges that the system grapples with and to resolve it in a way that works best to advance a child's right to quality education of choice. To this end, it is critical that the education policy advances and supports private initiative in education to foster competition in the system and choice for parents.

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