School Education in India
High Demand - Poor Outcomes

Redefining Success
Consolidation of Schools
Funds should follow students
Adjustment to demographic dividends
Community Ownership, Participation and Accountability

Reforms based on Critical Levers of Change
A First Principles Approach Towards Change

- Analyzing the root causes of failure
- Examining Current Trends
- Proposing reforms by Aligning Incentives
Two Central Elements in Indian School Education

Steep decline in enrolment in govt. schools’ & increase in private schools

Decline in standards across both govt. and private schools

Therefore, the need to focus on **Critical Levers of Change**
Despite Enormous Expenditure by the Government…

Rs.1,82,648 crore has been spent on Sarva Shiksha Abhiyan (SSA) since 2010

<table>
<thead>
<tr>
<th>State</th>
<th>Total enrolment (Classes I to X)* (2015-16; in Cr)</th>
<th>Total Expenditure (2017-18; in Crs)#</th>
<th>Huge Per Capita Expenditure (in Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telangana</td>
<td>0.28</td>
<td>10,215</td>
<td>36,059</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>0.39</td>
<td>23,000&amp;</td>
<td>58,975</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>0.68</td>
<td>48,845**</td>
<td>71,074**</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>0.52</td>
<td>26,932</td>
<td>50,873</td>
</tr>
<tr>
<td>Karnataka</td>
<td>0.52</td>
<td>18,266</td>
<td>34,685</td>
</tr>
</tbody>
</table>

Source:
* Estimates based on enrolment in each class, UDISE 2015-16
# Total expenditures on School education, State Budgets 2017-18
** PRS Legislative Research
& Based on AP HRD minister’s statement

Source: Budget Briefs Vol 9 Issue 2 - Accountability Initiative, Centre for Policy Research, 2017
...steep Decline in Govt. School Enrolment (Elementary Education)

Source: Flash Statistics 2015-16, UDISE
A Pronounced Shift towards Private Schools

In elementary education (Classes I to VIII), there is a clear decrease in govt. school enrolment and increase in pvt. school enrolment.

- Enrolment in govt. schools which stood at 133.64 million in 2007-08 decreased to 116.92 million by 2015-16, a decline of 12%.
- During the same period, pvt. school enrolment increased from 51.08 million to 74.65 a rise of 44%.
- The share of govt. schools in enrolment fell from 72% to 61%, whereas the share in pvt. sector rose from 28% to 39%.

Source: *Flash Statistics 2015-16, UDISE*
Enrolment Trends across States (Elementary Education)

Andhra Pradesh*

- 2007-2008: 6.8 Mn
- 2015-2016: 4.2 Mn

Karnataka

- 2007-2008: 5.4 Mn
- 2015-2016: 2.4 Mn

Maharashtra

- 2007-2008: 7.7 Mn
- 2015-2016: 7.9 Mn

Tamil Nadu

- 2007-2008: 4.8 Mn
- 2015-2016: 4.9 Mn

* 2015-16 data includes Andhra Pradesh + Telangana
Miserable Learning Outcomes

**ASER-2016 - Arithmetic**

<table>
<thead>
<tr>
<th>% of students who can</th>
<th>Subtract</th>
<th>Divide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std. III</td>
<td>27.6</td>
<td>8.4</td>
</tr>
<tr>
<td>Std. V</td>
<td>50.5</td>
<td>25.9</td>
</tr>
<tr>
<td>Std. VIII</td>
<td>66.5</td>
<td>43.2</td>
</tr>
</tbody>
</table>

Half of all children in Std. V cannot perform simple two-by-two digit subtraction.

More than half in Class VIII cannot perform three-by-one digit division.

**ASER-2016 - Reading**

<table>
<thead>
<tr>
<th>% of students who can</th>
<th>Read</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std. III</td>
<td>25.1</td>
</tr>
<tr>
<td>Std. V</td>
<td>47.8</td>
</tr>
<tr>
<td>Std. VIII</td>
<td>73.0</td>
</tr>
</tbody>
</table>

While learning levels in government schools plummeted, they are barely better in private schools.

More than half of class V students cannot read Std. II text.

Close to 27% Std. VIII students cannot read the same text.

Rani likes her school. Her class is in a big room. Rani has a bag and a book. She also has a pen.
Learning Outcomes not Improving with Time (ASER Surveys)

% of children in Standard V who can read Standard II level text

% of children in Standard V who can do division

% of children in Standard III who can do at least subtraction
• In the PISA (Programme for International Student Assessment) survey in 2009, at the age of 15 when children are tested for language, math, science and logic,
• India stood 73rd out of 74 nations Shanghai- China, Singapore and Hongkong- China stood first, second and third in that order.
• Only Kyrgyzstan was ranked lower than India!

Mean performance on the overall reading scale
According to the MHRD research report, ‘Equity in Access and Learning’ points out that the number of 6-year olds in India is expected to decline from 25 million in 2011 to 17 million in 2025, a decline of 30%.

The population of children aged 14 and 15, which stands at 50 million currently, is expected to decline to under 39 million by 2025.

The population growth rate which stood at 1.5% in the decade ending in 2011 is going to progressively decline and reach 0.2% in the decade of 2041-51.

The population of children in 0-14 yrs age group, which stood at 364 million in 2001 will decline to 327 million by 2026, and will decline much more rapidly after 2026.
Uneconomic Schools - Neither academically nor financially viable

<table>
<thead>
<tr>
<th>Schools with less than 50 students</th>
<th>Percentage of Single Teacher Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State</strong></td>
<td><strong>% Schools</strong></td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>48.69</td>
</tr>
<tr>
<td>Arunachal Pradesh</td>
<td>54.06</td>
</tr>
<tr>
<td>Goa</td>
<td>52.16</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>30.90</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>41.87</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>16.04</td>
</tr>
<tr>
<td>India</td>
<td>33.46</td>
</tr>
</tbody>
</table>

- Overall Pupil-Teacher Ratio stands at 24, but there are gross distortions across states.
- One third of the schools in India have less than 50 students, and
- One tenth of the schools are single teacher schools.
Skyrocketing Out-of-Pocket Expenses not a Demand Dampener for Private Schools

• An average Indian household spent around Rs 6,400 annually on education, which is almost double the amount spent a decade ago.

• One of the major contributing factors of the increasing expenditure on education seems to be the growing preference for private educational institutions over government, at least at the school level.

• Even in rural areas many families choose to send their children to pricey private schools, in spite of the presence of adequate number of government schools.

Enormous expenditure spent by the government

Budget Private Schools
Norm-based system has led to the shutting down of budget private schools

Government Schools

Unaffordable Private Schools

Features:
- Norm-based rather than result-oriented
- Students have little or no choice in terms of the school they wish to attend
- Schools don't have much incentive to improve.
Interventions at Multiple levels

**School Management Level:**
- Parent-Teacher interaction
- Teacher Motivation
- Attendance in schools

**Administrative Level:**
- Conducting examinations
- Recruitment of teachers
- Teacher training & transfers

**Policy Level:**
- Creating better incentives
- Redefining success by better evaluation
- Competition between multiple providers
- Developing a sensible mechanism to measure learning outcomes
The Way Out: Matching Supply with Huge Demand

Need for a clearheaded, evidence-based approach focusing on:

1. Redefining Success and measuring Real Learning Outcomes
2. Consolidation of Schools
3. Funds should follow students
4. Adjustment to demographic needs
5. Community ownership, accountability
Redefining Success and Real Learning Outcomes

Altering Incentives for the Stakeholders

STAKEHOLDERS

Redefining Success:

Focusing on Outcomes

Instead of Rote-learning
Redefining Success and Real Learning Outcomes

1. Measures to Improve Learning Outcomes

- Stress-free and regular assessments
- Measure basic educational skills
- Grasp of concepts & Application of knowledge

Evaluation System

- Teachers’ performance; strengthening teacher training
- Use of ICT to enhance the quality of education which includes teaching and learning techniques
- Learning outcomes of schools
- Guaranteed resources for effective inspection and monitoring

Inspection & Monitoring

- Teaching resources be deployed rationally
- Facilities and infrastructure can be better utilized
- Transport subsidy can be provided to the students from far away places

Consolidation of Schools
Redefining Success and Real Learning Outcomes

2. Measures to Improve Learning Outcomes

National and Global Testing & Accreditation

- Random Testing of Children
- Testing of Private Schools also
- Conducting Examinations

- Accreditation and testing of all schools
- Guidance and expert advice to State Testing Centers
- Conducting National Common Tests at appropriate levels

- Identify global best practices
- Participation in global assessment of educational outcomes

Independent Testing Mechanisms

National & State Testing Boards

International Comparisons and Global Testing
Consolidation of Schools

- U-DISE reports that 1/3rd of the schools in India have less than 50 students and 1/10th of the schools are single teacher schools where there is neither monitoring nor attention and are deemed to be uneconomic.

- Schools with over 150-200 students, at least 5 Class rooms and teachers and an institutional environment and minimum infrastructure tend to perform better because of economies of scale, institutional environment and better attention and monitoring.

- Teachers and facilities can be rationalized to meet requirements of the consolidated schools. It is preferable that a primary school should have at least 100 students, and high school should have at least 300 students.

- However, while implementing this policy, it is desirable to give a transport subsidy of, say Rs. 150 per month, if the school is, say more than 3 Kms from home.

Why Indians Prefer Private Institutions

Source: National Sample Survey Organisation (as cited by Indiaspend)
Funds should follow students

1. Independent Accreditation and Testing Boards proposed at all levels.
2. Funds will follow the students; parental choice of schools & reimbursement of fees for the poor.
3. No additional burden on the state: govt. school enrolment is falling & retiring teachers vacancies can be left unfilled.

### Funding should gradually shift from teacher salaries to tuition fees of students

<table>
<thead>
<tr>
<th>States</th>
<th>Total teachers in Government Schools (2015-16; Classes I to VIII)</th>
<th>Student-Teacher Ratio</th>
<th>Retiring Teachers per annum*</th>
<th>Assuming Average teacher salary per annum (in Lakhs of Rs.)</th>
<th>Savings, by not filling vacancies (in Crores of Rs.)</th>
<th>Private Expenditure per student (In Rs.)</th>
<th>No. of students who could be funded additionally, each year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>1,82,221</td>
<td>17</td>
<td>5466</td>
<td>7.50</td>
<td>410</td>
<td>15,000</td>
<td>2,70,000</td>
</tr>
<tr>
<td>Telangana</td>
<td>1,27,825</td>
<td>18</td>
<td>3835</td>
<td>7.50</td>
<td>287</td>
<td>15,000</td>
<td>1,90,000</td>
</tr>
<tr>
<td>Karnataka</td>
<td>1,75,780</td>
<td>24</td>
<td>5273</td>
<td>7.50</td>
<td>395</td>
<td>15,000</td>
<td>2,60,000</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>2,70,272</td>
<td>15</td>
<td>8108</td>
<td>7.50</td>
<td>608</td>
<td>15,000</td>
<td>4,00,000</td>
</tr>
<tr>
<td>Gujarat</td>
<td>2,07,688</td>
<td>28</td>
<td>6231</td>
<td>7.50</td>
<td>467</td>
<td>15,000</td>
<td>3,10,000</td>
</tr>
</tbody>
</table>

*Assuming the retirement percentage per annum at a reasonable 3%

Source: UDISE Flash Statistics 2015-16

This table does not include teachers of Secondary & Hr. Secondary classes in Composite schools
Funds should follow the student

- Government should identify moderate and low-cost private schools of reasonable quality based on advice of Accreditation and Testing Board. Schools which charge tuition fees below a certain prescribed ceiling should be brought under public education programme.

- Funding for education should shift gradually from teachers’ salaries to students fees. Funds will follow the students. If children go to accredited private schools under public education programme, the fee will be paid by the government.

- As only children from poor and lower income families are likely to be admitted in low-cost private schools, government funds will go only to the deserving children from indigent families.
Adjustment to demographic needs

• As the number of children to be enrolled begins to decline as shown in the slide on Demographic Transition, it will be prudent if government focuses on outcomes and encourages service delivery by private sector at an affordable cost. Culturally and managerially, private sector will show greater innovation and flexibility in dealing with changing personnel requirements.

• There is need to amend RTE Act and design public policy incorporating private schools as key education providers along with government schools.
Community Ownership, Participation and Accountability

School Management Committees: Reputed retired teachers who earned the trust of the community and reputed local NGOs in the field of education will add value to the management of the schools. Therefore a provision should be made to co-opt these groups in the School Management Committees.

Autonomous Education Boards at Block, District and City level: The Boards will have State and local officials, accreditation, testing, monitoring and inspection authorities, representatives of SMCs and local governments, experts in the field of school education, reputed non-profit organizations and representatives of private schools.

A state level autonomous Board: with State government officials, representatives NCERT, SCERT and District Boards, reputed NGOs, eminent educationists, state level testing board and representatives of higher education. The State Board should have full autonomy, authority and resources to address all challenges of school education including syllabus, text books, examinations, teacher training, accreditation and other relevant matters.
Real Choice & Competition Model

- Government funds students
- Parents free to choose schools
- Transport Subsidies

Evaluation system
Inspection and Monitoring
Testing Boards
International Comparison
Suggested Amendments to RTE

<table>
<thead>
<tr>
<th>Amendments Proposed</th>
<th>Section</th>
<th>Amendments Proposed</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusion of “unrecognized schools” in the definition of school</td>
<td>Section 2</td>
<td>Focusing on learning outcomes instead of input-centric norms and capital requirement standards.</td>
<td>Section 19,20</td>
</tr>
<tr>
<td>Removal of the concept of neighbourhood. Funding of child instead of school.</td>
<td>Section 3, 10</td>
<td>Formation of independent assessment bodies to conduct regular assessment in a stress free manner.</td>
<td>Section 21</td>
</tr>
<tr>
<td>Allowing children of any age to start school or resume school.</td>
<td>Section 4</td>
<td>Integration of School Development Plans (SDPs) with State’s planning and budgeting process.</td>
<td>Section 22</td>
</tr>
<tr>
<td>Allowing children to transfer to private schools of their choice.</td>
<td>Section 5</td>
<td>Teachers salary to be free from overregulation.</td>
<td>Section 23</td>
</tr>
<tr>
<td>Allowing non-profit organizations schools and facilitating privately funded non-profit schools.</td>
<td>Section 6</td>
<td>Teachers learning outcomes to focus on a class appropriate curriculum.</td>
<td>Section 24</td>
</tr>
<tr>
<td>Measuring and improving the learning outcomes instead of treating “compulsory education” as an obligation.</td>
<td>Section 8, 9</td>
<td>No need for unscientifically imposed teacher-student ratio.</td>
<td>Section 25</td>
</tr>
<tr>
<td>Making a standardized assessment institutional, by an Independent Authority.</td>
<td>Section 18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>