

Poverty and Primary Schooling

Field Studies from Mumbai and Delhi

A new and flexible approach to the schooling of children of the urban poor is imperative. Field studies in Mumbai and Delhi have yielded the insight that the reason for so many slum children not being in school has less to do with their families' economic circumstances than with the school system's shortcomings. The available evidence also suggests that the amount of learning the average slum family pupil in India acquires in primary school falls far short of what may legitimately be expected.

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One of the directive principles of state policy of the Constitution of India is that "the state shall endeavour to provide, within a period of 10 years from the commencement of this Constitution, for free and compulsory education for all children until they complete the age of 14". Although the number of primary schools in the country and enrolment into primary school has increased dramatically in the last 50 years, successive governments have failed to make 'education for all' a reality.

Universal primary education implies that every child lasts through the primary school stage and that every child learns. 'Every child' includes the children of the poor. This paper is about educating children of the urban poor. Based primarily on recent fieldwork in low-income localities in Delhi and Mumbai, the paper seeks to understand and analyse the hurdles that will have to be crossed if universal primary education is to be achieved.

Three sets of empirical observations motivate the discussion. Each deals with a basic question confronting primary education in India today: (1) Why are so many children out of school? (2) Why don't children last through the primary school stage? (3) What do they learn? Each of the findings discussed here is unexpected. By concentrating on surprising findings generated by field investigations, the paper will attempt to bring new perspectives in dealing with old but persistent questions.

The first section seeks to understand why children are out of school and not working. The evidence from household surveys in urban slums shows that the common explanation - children are not in school because they are working - is not

sufficient. The analysis suggests that the inadequacy of the school system to attract and keep children is more crucial than household economic circumstances for explaining why so many children are not in school.

The second section discusses why different cohorts of children in the same school have different experiences as they move through the primary school stage. Again, the data indicate that rather than household economic forces 'pulling' children out of school, school factors may be more important in 'pushing' children from school.

The third section focuses on achievement levels in primary school and analyses why there is little difference in learning levels between standard III and IV. The discussion highlights the need for innovative and consistent strategies to deal with children who are lagging behind academically.

The paper concludes by suggesting that without a new and flexible approach to cope with the schooling problems of the children of the urban poor, universal primary education is unlikely to be achieved.

I

Child Labour and Schooling

"Children are not at work but they are not in school"

Why are so many children not in school in India today? The dominant explanation hinges on poverty. Scholars and policy-makers often argue that children's earnings are necessary for supplementing family income, and therefore children do not come to school at all or leave school to work. What is the evidence that supports this point of view?

All-India Data: Data from the recent 50th round of the National Sample Survey (1993-94) suggests that this explanation is insufficient (Table 1). Based on a national sample of households, the survey indicates that out of 185 million children in the age group 5 to 14 nearly 58 million (about a third) are not in school.¹ Of the children aged 5 to 9 (roughly standard I to IV) who are not in school, a very large fraction is not working outside the home or in the household. Such children have been labelled 'nowhere children' [Chaudhri 1997]. Among the older children (aged 10 to 14) who are not in school, there are as many child labourers as there are 'nowhere' children. Even a quick glance at these figures suggests that non-attendance in school is not merely due to child labour, at least for the primary school age group.

For urban children, the NSS figures show that in the 5-9 age group less than 1 per cent is working full time, while a much larger fraction (15 per cent of boys and 18 per cent of girls) is neither in school nor working. As expected, older children work more than younger children. In cities, 6 per cent of the boys in the 10-14 age group work and are not in school; however, another 6 per cent of the boys are neither in school nor working. For girls, the picture is a little different: over 10 per cent of the girls are working either at home or outside and only 5 per cent are neither at work nor in school. The NSS data clearly show that there are a lot of children who are not in school in India, and that a significant proportion of these children are not at work either.

Local-Level Data: What evidence is available at the local level in urban areas that throws some light on the relationship between child labour and children's

schooling? The discussion in this section is based on primary data from a series of recent household and school surveys in slum areas in Delhi and Mumbai. Although the data were collected at different times and for a variety of purposes, the basic intent was to reach a detailed understanding of the problems faced by children of the poorest in the two cities.

The Delhi study focused on Ambedkar Nagar - a large low-income resettlement colony on the southern rim of the city. A comprehensive data-collection effort was made in 1994-95 to get a better grasp of the issues related to primary education faced by families and schools in the area. This included interviews with teachers and principals, surveys of households and compilation of school enrolment and attendance data. There are 30 municipal primary schools in the area, and a large and growing number of private schools.

In Mumbai, the focus was on specific populations and areas that were considered particularly difficult in terms of economic circumstances and stability in living conditions. Conducted through 1998, these surveys were for the purpose of estimating the numbers of out-of-school children planning their integration into the mainstream school system through a variety of programmes. These 'difficult' pockets include pavement dwellers in Kamathipura (not far from Mumbai Central railway station), adivasi households in Goregaon to the north-west, and a number of large unauthorised slums near Chembur, to the north-east.

Evidence from the poorest areas of both cities reveals that a substantial number of primary-school-age children are not in school. Although enrolment in Std I is generally very high in urban areas and most children have been enrolled at some time, many do not finish the primary school stage. In Delhi, the primary stage is from Std I to Std V, whereas in Mumbai it is from Std I to Std IV.

The Mumbai data indicate that in the three large slum pockets surveyed recently, almost one-third of all children in the 6-10 and 11-14 age groups were not in school (Table 2). This number does not include enrolled children who are chronically absent.² Children not in school includes children who have dropped out of the school system as well as children who have never been enrolled. The ratio of 'drop-outs' to 'never-enrolled' varies considerably by locality. In the Rafiq Nagar area (near Chembur) where most families

are Hindi- or Urdu-speaking, over 80 per cent of the out-of-school children had never been to school (Table 3). In Sathé Nagar, which has a Marathi-speaking population, there are more 'drop-outs' than 'never-enrolled'.

Figures from Delhi show that despite high enrolment in Std I, a substantial proportion does not last or 'survive' through the primary stage. This trend is visible all across the city's municipal schools. There is a clear decline in the numbers of children who move through the system from Std I to Std V (Table 4). The same phenomenon is visible in Ambedkar Nagar, in a more acute form (Table 5).

Overwhelmingly in both cities, teachers attribute non-attendance and dropping out to family economic compulsions and cite child labour as the main reason for children not continuing in school. The argument is that as the opportunity cost of children's time is high in poor families, poor children must leave school to work. This view is echoed by officials at different levels in the school bureaucracy as well. But our observations from the field and analysis of primary data collected in poor

communities leads us to argue that this explanation is not sufficient.

(1) The Mumbai slum surveys show that although a large fraction of primary school age children are out of school, very few children work full time (Table 2). Note that the surveys targeted some of the poorest households in the city. In three localities near Chembur, over 1,200 children between the ages of 6 and 14 were not enrolled in school; however, less than 100 children worked full time. Almost all the children who worked were more than 10 years old.

(2) The opportunity cost of children's time should increase with age; a 12-year-

Table 3: Past School Experience of Out-of-School Children, Rafiq Nagar (Mumbai), 1998
(Per cent)

Age Group	Total Out-of-School Children	Drop-Out	Never Been to School
6 to less than 10	331	24 (7.3)	307 (92.7)
10 to less 14	222	80 (36.1)	142 (63.9)
Total	553	104 (18.8)	449 (81.2)

Source: Field survey.

Table 1: Population, Activities of Indian Children (1993-94)

Age/Gender Groups	Total Population (Millions)	Percentage of Age Group			Total Child Population Not in School (Millions)
		In School	Not in School and Working	Not in School and Not Working	
Rural males 5-9	39.7	67.2	1.0	31.5	13.02
Rural females 5-9	35.7	56.2	1.8	40.8	15.63
Urban males 5-9	11.3	84.1	0.5	15.2	1.79
Urban females 5-9	10.2	80.1	0.9	18.6	2.02
Rural males 10-14	36.1	76.6	11.7	10.6	8.44
Rural females 10-14	30.3	55.7	20.4	14.0	13.42
Urban males 10-14	11.7	87.2	6.3	5.8	1.50
Urban females 10-14	10.5	81.6	10.8	5.3	1.93
Total	185.5				57.75

Source: 50th Round National Sample Survey (1993-94), 'Usual Status Activity'.

Table 2: Household Surveys (Selected Areas) Mumbai 1998

Children's Status	Rafiq Nagar	Zakir Hussain Nagar	Annabhau Sathé Nagar
	February 1998	September 1998	October 1998
Number of household surveyed	11511	718	1274
Total number of children (3 to 14)	2452	1511	1748
Age group: 6 to 10			
Total number of children	964	672	828
Total number of children currently in school	633	475	533
Total number of children currently not in school	331	197	295
Percentage of children not in school	33.5 per cent	29.3 per cent	35.6 per cent
Percentage of children who work	0.10 per cent	0.00 per cent	na
Age group 11 to 14			
Total number of children	657	341	396
Total number of children currently in school	435	267	227
Total number of children currently not in school	222	74	169
Percentage of children not in school	33.7 per cent	21.7 per cent	42.7 per cent
Percentage of children who work	7.8 per cent	3.4 per cent	na

Source: Pratham M/East ward field surveys.

old can be much more useful doing household chores or market work than a child aged six or seven. Therefore, it is not clear why a higher proportion of Std I and Std II children than Std IV and V children leaves school (Tables 4 and 5).

(3) There is a great deal of variation in primary school 'survival' rates across municipal schools in the same low-income locality - Ambedkar Nagar (Table 7). The 'household poverty' argument does not provide a compelling explanation of this variation. This proposition is reinforced by the facts that different schools operate in the same buildings (girls attending in the morning and boys in the afternoon) and that children are drawn from the same families and the same catchment area. Thus the household characteristics of the children are the same but their rates of survival through primary school are different.

(4) On the basis of data from Ambedkar Nagar's households, we estimated that the variation in overall family income and expenditure is low. Although household size and per capita expenditure within the household vary, there is no correlation between household size and the particular municipal school attended by the children. Thus, the variation in drop-out rates of schools in Ambedkar Nagar cannot be explained away by economic compulsions in families.

(5) Estimates of per capita household expenditures are available from Rafiq Nagar. Interestingly, there is no statistically significant difference between the estimates for households, with children in school and for those with no children in school.

Despite spending considerable amounts of time in these localities in Mumbai and Delhi, our team of investigators did not come across large numbers of children engaged in full-time income-generating activity. In Ambedkar Nagar, there is no organised activity for employing children full-time. Children do help in running family enterprises, but by and large it seems that children's full-time participation in work throughout the year is usually due to an extreme family crisis such as parental illness or death. Rafiq Nagar and Sathe Nagar are close to large garbage dumps. For adults in the area, sorting through the garbage and rag-picking are major occupations. Children assist parents from time to time, but such work can easily be adjusted with school timings. The municipal school in Rafiq Nagar is very close to where children live. There are two sessions - the morning one lasts till lunch

time and the afternoon one from 1 to 5:30. Theoretically, it is possible to combine one session of school with one session of work during a regular working day.

So far as domestic chores are concerned - older girls do help out - they do not consume much time. If mothers are at work the issue of sibling care arises. However, in predominantly Muslim areas such as Zakir Hussain Nagar and Rafiq Nagar most mothers do not work, and thus the question of sibling care constraining school attendance is not relevant. In fact, the survey question addressing children's work in the home evoked lots of smiles and laughter from mothers in Ambedkar Nagar. One mother's response: "Are you asking if children work or if they create work?"

Other researchers also find that the relationship between children not attending school and child labour is not as straightforward as is commonly thought [Bhatty 1998]. It is true, as Shanta Sinha of M V Foundation puts it that, "any child who is not in school is a potential child labourer" [Sinha 1996]. However, our data strongly suggest that the number of children who cannot go to school because they are working full-time is limited. This is true for children up to the age of 10 in the poorest urban localities.

Using child labour and/or family poverty as the main explanation for children's non-attendance in school is convenient. It implies that for getting children to come to school and stay put poverty has to be removed. "Garibi hatao" is a tall order, and successive governments have failed to do it. But if the main reason for children not being in school lies elsewhere, understanding the underlying phenomenon is crucial.

Parental apathy is sometimes cited as another major cause for children remaining out of school. To what extent do poor parents in urban areas care about their children's schooling? This author's experience in the poorest localities of both

cities suggests that even illiterate parents are well aware of the advantages of education. In fact, given the low level of household income and expenditure in these poor localities, it is surprising how many children do go to school.

Although municipal primary schools charge no fees and textbooks are free, there are other costs to attending school.³ Municipal schools have uniforms. Most children carry school bags and water bottles. Students are required to carry notebooks and pencils. Based on estimates from Ambedkar Nagar, these expenses could add up to between Rs 200 and Rs 600 per school-going child annually. The proportion of monthly expenditure that goes into direct costs of children's schooling is considerably higher in a poor household than in a middle-class family. Such expenditure is even more surprising given that most children will not even reach Std IV and that learning

Table 5: Survival Rate through Primary School, Ambedkar Nagar (Delhi) Municipal Primary Schools (Percent)

Year*	Mean Survival Rate through Primary School	
	Girls	Boys
1990	87.7	89.6
1991	81.6	83.1
1992	74.7	80.4
1993	63.7	73.8

* The cohort started standard I in 1989.
Source: MCD Enrolment data 1989-93.

Table 6: Children's Work and Schooling Status, Rafiq Nagar, 1998 (Percent)

Children's Schooling and Work	Age Group	
	6 to <10	10 to <14
Not in school and not working	33.8	28.4
Not in school and working	0.7	5.3
In school and not working	65.2	64.4
In school and working	0.2	1.6
Missing data	0.1	0.3
Total	100.0	100.0

Table 4: Survival through Primary Stage in Delhi Municipal Schools 1989-92

Year in Which Cohort Started Standard I	Size of Cohort or Enrolment Standard I	Percentage of Cohort		
		Surviving to Standard II	Surviving to Standard III	Surviving to Standard IV
Boys				
1989	82298	91.3	86.5	84.7
1990	89427	90.2	84.8	-
1991	94850	86.1	-	-
Girls				
1989	82347	90.5	83.7	79.4
1990	90088	89.4	84.9	-
1991	94114	88.5	-	-

Source: Municipal Corporation of Delhi Enrolment data 1989-92.

levels are known to be low in municipal schools.

Even in low-income colonies in Indian cities, private schools - which charge admission fees and monthly fees - are mushrooming. Limited options prompt poor parents to send their children to nearby private schools. In Rafiq Nagar, 17 per cent of the children of primary school age go to schools other than municipal schools. In this locality the average monthly household expenditure is around Rs 2,000.

Interviews with parents in Ambedkar Nagar have revealed that households follow complicated strategies to optimise schooling given the limited options available. One common strategy is to send the sons to a private school and the daughters to the local municipal school. Another strategy used by a number of families is to send the child to the municipal school but invest in tuitions at home, especially if the child is bright. One unusual and rather innovative family sent their son to municipal school in the morning - so that he could get the mid-morning snack and the free textbooks - and a neighbourhood private school in the afternoon. Poor parents feel that the child will learn something in a private school and so take on the additional expenditure involved.

From fieldwork during the Mumbai slum surveys, we found that each locality had a particular set of reasons for children not being in school. Much of Rafiq Nagar is unauthorised, and every few weeks some portion of the locality is demolished. Families either move away or relocate somewhere else within Rafiq Nagar. Part of the reason for many children in this area being out of school has to do with this constant instability in their lives. Although many families have lived in Rafiq Nagar for a long time, they consider their stay in the area a temporary phase.

The municipal school that serves the children of Sathé Nagar and Zakir Hussain Nagar is far away. It would take a child more than half an hour to walk there. Since many parents, especially in Sathé Nagar, leave home early to work, there is no one to supervise the children or to see if they are indeed going to school. Parents also worry about the safety of their children as there are major highways on the route to the school.

Finally, much depends on the school - its attractiveness and its ability to absorb the children of the poorest. As can be expected, municipal primary schools in Ambedkar Nagar and the Mumbai localities

are extremely overcrowded. For example, the municipal school that serves Rafiq Nagar has classes being taught in two languages. In the Urdu-medium school there were 11 sections of Std I, nine sections of Std II, eight of Std III and seven of Std IV. Some classes were held in the corridor, and class sizes were already very large.

Even though children aged six or seven could be absorbed into the school, without considerable prior preparation it would be impossible to integrate into the school older children who have either never been to school earlier or who have dropped out.

Out-of-school children living in the poorest localities tend to lead very independent lives. In contrast to children from middle-class families these children, especially boys even as young as eight, often go where they wish and do what they want. The prospect of going to school, sitting in a crowded room and listening to a boring teacher does not appeal to such boys and girls. In Rafiq Nagar boys aged 10 to 12 sort garbage in the dumping ground in order to earn just enough money to go and see a movie. Innovative and joyful methods are needed to capture the imagination of such free children. As most of the large urban municipal school systems are not flexible or fun, it is hard to keep such children motivated to learn.

The field studies indicate that a large part of the blame for so many Indian children being out of school rests on the school system rather than on family poverty.

Survival through Primary School

"Children in the same school, but in different cohorts, have different survival patterns."

The term 'survival' is used here in the context of whether children last in school through the primary stage. Words such as 'drop-out' or 'retention' are used more commonly to describe the same phenomenon. 'Survival' highlights better the difficulty that children from poor families seem to have in navigate through primary school. Cohort, here, refers to a batch of children that start school together in Std I.

The Ambedkar Nagar study established some basic facts about 'survival' through primary school: (1) The size of each cohort decreases as it moves through the primary grades from Std I to Std V. (This

Table 7: Survival through Primary School in Municipal Primary Schools, Ambedkar Nagar (Delhi)*

School (Identified by Number)	Survival Till Std V: Boys (Percentages)	School (Identified by Number)	Survival Till Std V: Girls (Percentages)
1	61.3	1	55.4
2	61.8	2	44.8
3	59.8	5	-
4	77.7	18	88.4
5	-	19	62.9
6	53.5	20	61.6
7	48.7	21	54.2
8	89.1	23	62.0
9	75.2	24	60.0
10	62.4	25	53.3
11	72.1	26	65.8
12	72.4	27	42.1
13	96.3	28	71.8
14	77.1	29	56.4
15	79.4	30	59.2
16	81.6	31	71.5
17	83.4	32	60.4
34	78.1	33	97.0
35	67.0	35	80.0

* The cohort started standard I in 1989.
Source: MCD Enrolment data 1989-93.

Table 8: Survival to Std III in Municipal Primary Schools in Ambedkar Nagar

School (Identified by Number)	Survival Percentage		
	Cohort Started Std I in 1989	Cohort Started Std I in 1990	Cohort Started Std I in 1991
<i>Boys</i>			
1	88.3	73.6	83.0
2	86.8	63.2	98.8
3	69.0	85.7	73.0
4	85.1	89.7	105.6
6	68.4	85.2	91.7
7	56.5	66.1	88.3
8	79.5	89.0	128.3
9	88.7	95.2	83.2
10	78.2	100.6	73.5
11	75.4	72.1	72.3
12	90.5	75.6	78.3
13	97.0	93.9	106.5
14	82.6	75.3	70.2
15	83.1	80.7	80.6
16	92.0	76.9	83.3
17	90.8	76.7	84.0
34	109	85.0	63.0
35	79.6	109.4	121.1
<i>Girls</i>			
1	64.1	95.3	63.2
2	80.2	85.3	79.7
18	94.7	73.5	86.3
19	81.5	94.0	80.7
20	72.6	74.9	86.5
21	79.3	95.8	86.8
23	64.2	59.1	81.5
24	84.1	62.3	80.9
25	74.8	70.8	94.7
26	94.7	82.5	84.9
27	76.9	83.3	75.7
28	79.9	100.6	86.1
29	81.2	95.2	71.5
30	79.3	73.3	65.5
31	94.6	94.5	74.5
32	71.8	76.3	71.9
33	100.0	82.4	77.6

Source: Municipal Corporation of Delhi primary school enrolment data 1989-93.

phenomenon is true city-wide, as Table 4 shows.) (2) There is a great deal of variation in primary school survival rates among schools in the locality (Table 7). (3) There is considerable variation in primary school survival rates among cohorts of different years in the same schools in the locality (Table 8).

Since the first two findings have been discussed in the previous section, we will focus mainly on the third here. Table 8 shows the survival rates of different cohorts as they move through the primary school years in the same schools in Ambedkar Nagar. The cohorts that started school in 1989 represent the only set for which we have data for five years, i.e., for the entire primary school stage. For cohorts that entered school in the next few years we have enrolment data that can be used to track them till Std III.⁴

The tracking of different cohorts within the same school reveals some surprising differences in survival rates within each school. For example, in school number 6, only 68 per cent of the boys who started in 1989 survived till Std III. But for the next two cohorts in the same school the survival rates were 85 per cent and 92 per cent respectively. In school number 16, the survival rate varied between each year and the next by more than 13 percentage points.⁵

This surprising empirical observation - variation within schools - could perhaps be an artefact of the quality of the data and the problem connected with measuring enrolment. However, if the observed pattern reflects a true trend, it is no longer enough to blame home factors and poverty for children not staying out of school. The children in different cohorts are drawn from the same set of households. There is no evidence of variation in home characteristics as between one cohort and another. Clearly, the variation in cohort experiences warrants a closer look at what is happening within each school.

If home factors do not significantly influence survival patterns of different cohorts within the same school, one must look carefully at school factors. The survey of Ambedkar Nagar's schools did not reveal any important variations over the years in school inputs in terms of facilities, materials or resources. Interestingly, the survival patterns in the 'tent' schools were no different from those in the schools which had buildings. Nor was much variation found in teachers' qualifications. Teachers are recruited centrally by the Delhi

school administration. All have at least a BA degree.

In the academic literature on school inputs, the significance of the teacher-student ratio has been a subject of much debate in western and developing countries.⁶ Although there are variations in the teacher-student ratio across schools and within schools across years, the data from Ambedkar Nagar fails to establish a strong relationship between teacher-student ratios and survival rates for different cohorts.

What, then, is the explanation of some cohorts surviving better through primary school? A few speculations:

(1) Ambedkar Nagar schools suffer from periodic teacher shortages. In the mid-1990s, teachers for municipal schools in Delhi were not recruited annually. Even when new teachers are tested and hired, allocating them to schools is a time-intensive process. It is possible that the differences in cohort experiences may be explained by these cycles of teacher shortages.

(2) A unique feature of Delhi's municipal schools is that each teacher moves with her/his class from Std I to Std V. The advantage of this policy is supposed to be that teachers get to know students' strengths and weaknesses and that teaching and

learning benefits accrue from a long, stable relationship between teacher and students. In reality, if a cohort happens to get an effective teacher, their schooling experience all through primary school is likely to be a positive one, and the survival rates are likely to be high. But if the reverse happens, no amount of school-level resources can counter the accumulated negative effects of having a poor teacher for five years.⁷ The impact of school-level inputs such as facilities, textbooks, midday meals is felt evenly by all cohorts in the school. The working environment or 'school culture', which undoubtedly influences teachers' and students' behaviour is also experienced equally by all classes in any given school. However, teachers are cohort-specific. So the source of the differences among cohorts' survival experiences may lie in teacher quality rather than in any other school-level resource.

Innovative large-scale projects are being attempted in rural areas in different parts of the country. In Madhya Pradesh, the government has been engaged in a very successful project called the education guarantee scheme [Gopalakrishnan and Sharma 1998]. Under this scheme, communities in areas not served by a primary school apply for a school, and one

Table 9: Results of Achievement Test: K East Ward, Mumbai

Characteristics of the Sample	Language	Arithmetic	Total
Total number of students tested = 488			
Mean score for full sample (std deviation in parentheses)	76.9 (19.8)	72.4 (24.6)	74.0 (21.7)
Total number of students tested in std III = 213			
Std III mean score	77.4 (19.04)	71.8 (25.2)	73.7 (21.6)
Total number of students tested in Std IV = 275			
Std IV mean score	76.6 (20.4)	73.0 (24.2)	74.25 (21.9)
Median score for Std III	84.0	81.5	82.1
Median score for Std IV	83.0	78.9	74.25

Note: The test was conducted in February 1997.
Source: Pratham K/East testing project 1997.

Table 10: Achievement Levels in Primary Schools (Selected Studies)

State	Type of Location	Source	Children	Finding
Madhya Pradesh	Privileged urban zone	Govinda and Varghese (1993)	Std IV and Std V students	70 per cent of Std IV and 60 per cent of Std V students had not mastered Std II competencies in Hindi and mathematics
Madhya Pradesh	Highly under-developed rural zone	Govinda and Varghese (1993)	Std IV and Std V students	No Std IV or Std V student had mastered Std II competencies in Hindi and mathematics
West Bengal	15 districts	Roy, Mitra and Ray (1995)	Std IV students	Only 20 per cent of students obtained minimum expected score in Bengali and mathematics
22 States		Dave and others (1988)	Std IV students	Average Std IV achievement was 35 per cent in language and 32 per cent in maths. The passing mark was 35 per cent for all subjects.

Source: India: Primary Education: Achievements and Challenges, World Bank document, report 15756-IN.

is started within 90 days. In a mere year and a half, nearly 20,000 schools have been opened across the state. The teacher, called 'guruji', is a local person who is directly paid by, and accountable to, the panchayat. Although this scheme is less than two years old, the local accountability of the guruji is likely to facilitate better retention and survival than in formal schools.

In Rangareddy district of Andhra Pradesh, MV Foundation, working through their very effective 'bridge course' programme, has helped bring large numbers of working and bonded children to school. As part of their effort to mainstream these children, the foundation's village-level activists work with the local school to ensure that these children do not drop out once they enter regular school. The Andhra Pradesh government has adopted the 'bridge course' idea for statewide implementation on the basis of the foundation's experience.

In Delhi and Mumbai, however, no consistent large-scale efforts to retain vulnerable children in school have been made recently. Although the schools in areas like Ambedkar Nagar and Rafiq Nagar are aware of who the chronically absent children are, they do not have the resources to track those children down, visit their homes and persuade them to return and stay put. Their teachers are not given special inputs to facilitate rapport-building with children or improving teaching techniques. The municipal system is supposed to provide equal schooling opportunities for children across the city, but there are inequalities in the allocation of teachers and teachers' working conditions in different localities in the same urban school system. Typically, municipal school teachers who teach in the slum areas do not live in the immediate neighbourhood; generally, their caste/economic background is quite different from that of the children in their class. Communication between these qualified teachers and poor, illiterate parents is problematic.

The urban municipal school system does not provide teachers who have to deal with the poorest populations in the city any additional support in terms of resources for enriching the classroom environment, extra training or community outreach. When individual teachers are empathetic and effective, children benefit tremendously, as can be seen in the vastly different cohort-survival experiences. However, the system does not reward

teachers who do exemplary work under difficult conditions.

III

Pupil Achievement Levels

"Std III children's achievement levels are very similar to that of Std IV children"

How competent is an average municipal school child in language and arithmetic by the time he or she finishes primary school? Answering this question is difficult either in Delhi or in Mumbai. In neither city, are there standardised tests at any grade level in primary school. The assessment of student progress is done within each classroom by the teacher - generally on the basis of the content of the prescribed textbook.

In order to get an estimate of achievement levels, we decided to focus on a small number of classrooms but test all the children in each class. In February 1997, this test was administered one-on-one to each of nearly 500 children in 16 Std III and IV classes in the K/East municipal ward of Mumbai.⁸ We hoped that this exercise would give us an accurate estimate of the mean levels of competence in each class and also provide a reliable insight into the distribution of skill levels for the whole class.⁹

The content of the test was based on Std I and II material.¹⁰ In the language section of the test, children were asked to recognise letters of the alphabet, read and write simple words and answer simple comprehension questions based on a given picture. In the arithmetic section of the test, children had to recognise and write numbers between 1 and 100. They were asked to complete two-digit addition and subtraction problems (with no 'borrowing' or 'carrying'). There were also a few one-digit addition and subtraction problems.

A number of surprising results emerged from this testing exercise (Table 9). For one thing, the average scores were lower than expected. Since much of the test was based primarily on Std I material, it was expected that most Std III and IV children would score close to 100 (out of 100). However the mean score for language was only a little above 75 per cent while that in maths was less than 72 per cent. Secondly, the mean score for Std III was not significantly different from that for Std IV.

A large proportion of the children did not have mastery over basic language and maths skills. A fourth of the children tested could not correctly read and write letters

of the alphabet or simple words; 33 per cent of them could not correctly recognise and write numbers 1 to 100.

It is not possible to estimate growth in learning on the basis of measurement of children's competency at one point in time. In order to assess the 'value added' in terms of additional learning over a period of time, we would need data from at least two time points for any given child. However, it would make sense to expect that a Std IV child would score better than a Std III child on the same test. Since Std IV children have spent an additional year in school, the additional time should translate into a higher level of learning.¹¹ Therefore, it is surprising to find that the mean level of learning in Std IV and the tail of the distribution are similar to those in Std III.

What lies behind this odd finding? A number of reasons have been suggested by those in the municipal school system in Mumbai or close to it. One explanation is that Std III is often looked after by a school's head teacher or deputy head teacher whose administrative duties frequently takes him or her out of the classroom.

A more compelling explanation is based on a hard reality of most Std III and IV municipal classrooms across Mumbai. Despite a policy shift towards skill-based instruction and assessment, the teacher still feels accountable for completing the prescribed syllabus. The syllabus or the textbook assumes that children's academic progress occurs in a linear way - that the children have mastered the skills and competency of the previous grade before moving into their current grade. Therefore, children who are attending Std III this year must be familiar with Std II material.

The government has an 'all pass' policy in primary school; children who have attended school regularly are automatically promoted to the next grade regardless of level of learning. Further, there is little by way of serious or consistent remedial measures for those who lag behind academically. As a result the number of children who need extra help and attention to stay at grade level continues to grow as the children move through the primary school.

A teacher might be aware that some children in her class have serious difficulties with basic arithmetic concepts that the competency level of these children (sometimes 20 or 30 per cent of a class) is well below the prescribed curriculum for that grade level. But if she spends her time

in strengthening the basic skill level of such children she would have less time for the rest of the year to complete the syllabus. The teacher is faced with the challenging task of dealing with a student body with a very diverse set of competencies, on the one hand, and finishing the prescribed syllabus, on the other. Children who fall behind stay behind as the rest of the class moves ahead. Most primary school teachers take the least risky route of concentrating on those children who perform at grade level and can cope with the syllabus.

Private schools do not follow the 'all pass' policy. Children who 'fail' are kept back. Parents must seek remedial action outside the school. Through a heavy load of tests and reports, the school and parents ensure that a child does not fall behind.¹² Many municipal school children, especially those from the poorest families, cannot depend on family members for help with school work. Even if an illiterate father can comprehend that his child is not making progress, in most cases he cannot afford to organise private tuitions to help the child 'catch up'. Without serious and committed remedial help at school, the children who begin to lag behind just get further behind and can never really catch up.

To bring the laggards up to par is not easy. However, data from a remedial study class project suggests that catching up is not impossible. However, a whole set of strategies is required [Pratham 1998]. Pre-test and post-test data from the study class project indicated that significant progress is feasible even among 'slow learners' in Std III and IV.

The focus of the study class project, a large pilot scheme, was on children in Std III and IV who had fallen behind academically. The project covered 50 schools and approximately 1,000 children who had been identified by their class teachers. In addition to their usual lessons, the children also attended study classes either before or after school hours. The study class teachers did not have BEd or MEd degrees. Most of them had studied only up to Std XII. But they wanted to work with children and had had a great deal of experience with community mobilisation. They received a short course of training before they embarked on the project, the main aim of which was to help these children achieve mastery over Std II language and maths competencies.

While the goals of project were clearly specified, the study class teachers were encouraged to be creative with teaching methods and materials. Some used traditional textbook-blackboard-notebook methods; others, more innovative, incorporated games and activities in their teaching. However, all the teachers paid a great deal of attention to building a strong relationship with each student. Boosting the children's self-confidence, giving them individual attention, tailoring instruction to each child's level, building parental support for the children's learning - these were the key ingredients of the success of the project.

Low achievement levels are not a phenomenon of Mumbai municipal primary schools alone. Studies conducted by the government as well as the World Bank report similar findings from all over the country (Table 10). Yet the problem of achievement is a very critical one. At the micro level (from the perspective of the household) or at the macro level (from the perspective of the government) there is no point in spending a vast amount of human and financial resources in sending children to school if they do not learn much.

Official figures suggest that the government spends approximately Rs 1,000 per year on a school going child [Gol 1997]. In Mumbai the per student government expenditure is even higher: Rs 4,393 per year, on the basis of the education department budget. What does this money buy in terms of basic skill acquisition? A very rough estimate, based on a variety of government and other studies, suggests that, on average, four years of schooling generates learning levels worth two years across the country.

While several recent projects government and non-government, have helped increase access to and enrolment in primary school, the task of raising achievement levels is much more difficult. Raising achievement consistently across the board requires new thinking and innovative action on a number of interrelated questions. What is to be taught/learned? How is the teaching-learning process to occur? How will it be known if adequate learning is happening? In the 'production' of learning, a tight curriculum-instruction-assessment nexus is crucial.¹³ At the same time, schools and teachers need to be held accountable - internally by the school system, and externally by the community, for the

achievement levels of children who attend school regularly.

Conclusion

The three sets of empirical findings discussed in this paper serve to highlight specific problem aspects of primary schooling in urban India today and to show that the standard explanations are not sufficient. Based on field studies in slum communities in Mumbai and Delhi, the paper suggests that reasons why children are not in school or why they are not learning have more to do with the nature of schools than with the economic circumstances of their families. While school enrolment has risen dramatically in cities and villages, the ability of the government school system to retain and adequately educate children has been less impressive.

In cities like Mumbai and Delhi, where the municipal school system serves large numbers of children from poor families, the schools and their teachers are not equipped to cope with children who are first generation learners in their families or the children of families which are first generation urban residents. An urban school system is supposed to provide schooling opportunities for all the children in the city. However, planning and implementation of this mandate seems to assume that each school can cope with this task on its own. The large inequalities among schools in terms of teaching-learning conditions are largely ignored.

The coverage of poorer localities in cities by schools has expanded, but not fast enough to keep pace with the growing populations of these areas. The school systems of Mumbai and Delhi do not have the flexibility to quickly reallocate teachers, materials and resources from one part of the city to another. For example, municipal school enrolment in south Mumbai has declined over time even while in suburban areas, schools are bursting at the seams and teachers have very large numbers of children in their classes. Overcrowded schools are difficult places for teaching or learning.

For retaining children through the primary stage or helping them to 'survive' from Std I to Std IV or V, schools and teachers in difficult areas are neither given support and resources nor are they rewarded if they do an effective job. In the highly centralised bureaucracy of the Mumbai and Delhi municipal systems schools do

not have the power to make decisions at the local level to solve immediate problems. Whether it is a teacher shortage or a question of maintenance, the principal has to contact the relevant higher authorities in the zonal office. Even for changing a tube light in a classroom, permission or materials have to come from the educational bureaucracy.

The most serious crisis in primary education today pertains to learning. Since there are no standardised tests or 'board' exams until high school, this endemic problem remains hidden. Yet, from a number of studies conducted by the government and others, it appears that on an average, four years spent in school by a child and government expenditure of about Rs 1,000 a year per child (national average) generates learning at barely the Std II level. This is the most serious failure of the education system in India. Education experts claim that for permanent literacy and numeracy a child needs exposure of four continuous years in school. In India, even a four year span is not enough. Many children who have been to school for several years are not permanently literate.

A large number of programmes to increase learning are being conducted in different parts of the country through the efforts of the government, international agencies and the voluntary sector. 'Joyful education' is being proposed as a solution to the problem of low achievement. In addition, to creative classroom techniques, teacher/school accountability is a must. Greater transparency is needed so that people outside the school walls have a sense of what is going on within the classroom. Parents must know and understand what their children are supposed to know so that they can figure out why the children are not learning and how they can help.

A flexible approach is essential for the universalisation of primary education in India. Innovative action at the local level whether in the classroom or in the community must be recognised and encouraged. Commitment on the part of schools and communities to the education of all children must be publicly rewarded. It is only such concerted efforts that can bring about schooling for all. EPW

Notes

[A version of this paper was presented at a seminar on economic reforms and the poor, Rajiv Gandhi

Foundation, December 6-7, 1998, New Delhi. The paper is based on two different data collection efforts. In 1994-95, a case study of primary schooling in Ambedkar Nagar (a resettlement colony in south Delhi) was conducted. The field work was completed in collaboration with the programme of research on economic security and marginalised communities based at the Indian Social Institute, Delhi, with financial support from the Canadian International Development Agency. I gratefully acknowledge the support of Jean Dreze, Meera Samson, Anuradha De and Claire Noronha for the Delhi project. From 1996, I have been engaged in a variety of data collection efforts in Mumbai as part of Pratham-Mumbai Education Initiative's research unit. The support of Pratham staff has been invaluable as has been the co-operation from teachers, staff and officers of the education department of the municipal corporation of Greater Mumbai.]

- 1 The NSS definition of usual status is based on the principal activity of the person. 'Principal activity' means that the person has been engaged in it for more than 183 days a year.
- 2 The health and hygiene conditions in these areas are appalling, particularly during the monsoon. Water is scarce and clean drinking water scarcer still. Although estimates of ill health-related absenteeism from school are not available, it is likely to be quite high.
- 3 According to the calculations of Tilak (1996), the average annual household expenditure per urban student varies between Rs 115 in Andhra Pradesh and Rs 249 in Bihar.
- 4 The calculation of the primary school survival rate is based on the size of a cohort as it moves through the school years. Essentially, the size of a cohort starting in Std I in a given year is compared to the size of the same batch of children in succeeding years at subsequent grade levels. There could be several reasons for the cohort size changing over time. One, children could repeat a class. But since the Delhi municipal school system has an automatic pass policy the problem of repeating is very low. Two, children may be transferring from municipal schools to private ones. Third, children could move between schools or leave the city altogether. Fourth, if enrolment data were inflated to begin with, the decline in cohort size may be artificial. Finally, the decrease in numbers of children may also be because they leave school completely and do not enrol in any other school.
- 5 There are a few schools in which the survival rates seem to be greater than 100 per cent. This could be due to poor data. However, a closer look at these schools reveals some peculiarities. For example, school 33 is the smallest school in the area in terms of enrolment but it is also among the fastest growing. It also has some of the best student-teacher ratios. Perhaps students transfer to this school.
- 6 See Banerji (1997) for a summary and discussion of this issue.
- 7 The Ambedkar Nagar study did not collect information on teacher quality or on the length of her/his association with her/his current class. So it has not been possible to empirically test the validity of the speculation that with a

'good' teacher survival rates are high through primary school.

- 8 The ward includes Andheri (East) as well as sections of Vile Parle and Jogeshwari.
- 9 Since an external team administered the test in the same way in each class, teacher bias and distortions caused by differences in test administration were, hopefully, eliminated.
- 10 The actual test was the same as that used in 1995 by the municipal corporation's education department.
- 11 For understanding the relationship between education and earnings, it is standard practice to use 'years of schooling' as a proxy variable for education. The assumption is that an additional year spent in school adds 'value' in terms of skills and productivity, the 'added value' is rewarded in the labour market with higher earnings.
- 12 Ignore for now the psychological costs of frequent tests, exams, report cards and tuitions.
- 13 A number of initiatives across the country have incorporated these ideas in their programmes. 'Joyful learning' programmes are in vogue in many states. However, a great deal of continuous creativity and innovation is needed among teachers for making teaching and learning 'fun' and productive. The policy shift towards competency-based learning began in the late 1980s to early 1990s. The governments of some states such as Maharashtra have developed new textbook - assessment schemes and teacher training modules that are linked to competency standards. The Maharashtra government feels that the early effects of the new SMARTPT programme on children's achievement has been positive.

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