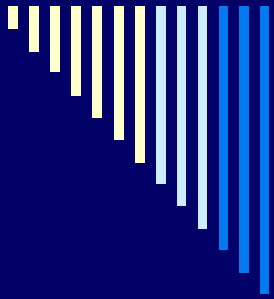


The role of education: quality and policy instruments

**Talk prepared for FAO/ILO
Workshop Rome 14-16 April 2010**



- Annual Status of Education Reports

Pratham (NGO) tests learning outcomes among 500,000 to 700,000 rural school children in India each year.

Reading, Writing and Mathematical Skills

Google 'ASER centre' or 'Pratham'



Bihar and Gujarat

TABLE 4: CLASS-WISE % CHILDREN WHO CAN READ (ALL SCHOOLS) 2009

STD.	Nothing	Letter	Word	Level 1 (STD 1 Text)	Level 2 (STD 2 Text)	Total
I	43.0	38.8	11.2	3.8	3.1	100
II	14.1	35.6	29.5	12.2	8.6	100
III	6.1	20.4	29.8	23.8	19.9	100
IV	3.0	10.4	19.9	26.9	39.8	100
V	2.2	6.4	11.2	23.1	57.2	100
VI	1.2	4.0	6.4	16.4	71.9	100
VII	1.5	2.5	4.1	9.2	82.7	100
VIII	0.6	1.5	2.5	7.5	87.9	100
TOTAL	11.7	18.5	16.4	15.6	37.8	100

NOTE: Each cell shows the highest level of reading achieved by a child. Thus a child who can read Std II level text can read letters, words, and Std 1 level text.

TABLE 4: CLASS-WISE % CHILDREN WHO CAN READ (ALL SCHOOLS) 2009

STD.	Nothing	Letter	Word	Level 1 (STD 1 Text)	Level 2 (STD 2 Text)	Total
I	36.9	46.3	9.3	5.3	2.3	100
II	11.7	40.6	29.1	11.2	7.5	100
III	5.9	26.0	30.2	22.0	15.9	100
IV	2.6	14.6	22.3	31.2	29.4	100
V	2.4	9.4	15.0	28.9	44.4	100
VI	1.5	6.8	9.3	25.7	56.8	100
VII	1.6	5.1	6.1	20.7	66.6	100
VIII	1.3	4.4	2.9	14.2	77.2	100
TOTAL	8.0	19.5	16.1	20.4	36.0	100

NOTE: Each cell shows the highest level of reading achieved by a child. Thus a child who can read Std II level text can read letters, words, and Std 1 level text.



Uttar Pradesh and Kerala

TABLE 4: CLASS-WISE % CHILDREN WHO CAN READ (ALL SCHOOLS) 2009

STD.	Nothing	Letter	Word	Level 1 (STD 1 Text)	Level 2 (STD 2 Text)	Total
I	43.5	41.5	10.2	2.8	2.0	100
II	18.7	40.1	25.7	9.9	5.8	100
III	9.9	29.6	29.1	19.3	12.1	100
IV	5.6	19.3	24.1	27.0	24.0	100
V	3.6	13.4	19.3	26.0	37.7	100
VI	2.1	7.7	11.7	24.9	53.6	100
VII	1.4	5.4	8.0	19.7	65.4	100
VIII	0.9	4.2	5.1	14.8	75.0	100
TOTAL	13.2	23.1	17.7	17.2	28.8	100

NOTE: Each cell shows the highest level of reading achieved by a child. Thus a child who can read Std II level text can read letters, words, and Std 1 level text.

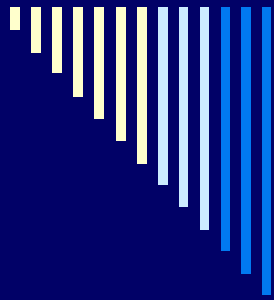
TABLE 4: CLASS-WISE % CHILDREN WHO CAN READ (ALL SCHOOLS) 2009

STD.	Nothing	Letter	Word	Level 1 (STD 1 Text)	Level 2 (STD 2 Text)	Total
I	3.9	28.7	42.7	15.1	9.6	100
II	2.7	11.8	33.2	26.6	25.7	100
III	0.5	7.3	18.6	30.7	42.9	100
IV	0.8	3.4	11.0	25.8	59.2	100
V	0.5	2.6	7.7	17.9	71.3	100
VI	0.4	1.3	4.8	16.4	77.0	100
VII	0.5	1.4	3.2	13.3	81.7	100
VIII	0.3	0.5	2.0	11.1	86.1	100
TOTAL	1.1	6.5	14.4	19.6	58.5	100

NOTE: Each cell shows the highest level of reading achieved by a child. Thus a child who can read Std II level text can read letters, words, and Std 1 level text.

Table 2. Description of Variables

Variable	Description
<i>Individual and household characteristics</i>	
MALE	Dummy variable: 1 for boys, 0 for girls
AGE5 to AGE17	Age dummies: 1 for children of relevant age (e.g., five for AGE5), 0 otherwise
AGE_CH	Child's age in years
AGESQ	Square of child's age in years
EDU_MO	Years of education of mother
EDU_FA	Years of education of father
CASLAB	Dummy: 1 if the household's main occupation is casual labor, 0 otherwise
JOB	Dummy: 1 if household's main occupation is regular wage employment, 0 otherwise
ASSET	Index of assets owned by the household constructed as follows from owned assets: asset = (2*number of watches) + (5*number of cycles) + (2*number of radios) + (7*number of televisions) + (50*number of motorbikes)
PCCRMS	Number of <i>pucca</i> rooms in the house
COWGOAT	Total number of cows, buffaloes, and goats owned by the household
LANDOWN	Amount of land owned by the household, in acres
DEPEND	Dependency ratio in the household: number of children (age 0–18) divided by number of adults
MUSLIM	Dummy: 1 for Muslim households, 0 otherwise
SCST	Dummy: 1 if household belongs to a schedule caste or schedule tribe, 0 otherwise
OBC	Dummy: 1 if household belongs to an "other backward caste", 0 otherwise
MOTIV	Dummy: 1 if main respondent answered "yes" to the question "Is it important for a girl to be educated?"; 0 otherwise
<i>Village characteristics</i>	
VVEC	Dummy: 1 if village has a village education committee, 0 otherwise
VDEVELOP	Village development index: the dummy variables <i>VELEC</i> (village has electricity), <i>VPOST</i> (village has a post office), <i>VPIPEW</i> (village has piped water), and <i>VPHONE</i> (village has a phone) each take the value 1 if the village has the relevant facility and 0 otherwise. Then $VDEVELOP = VELEC + VPOST + VPIPEW + VPHONE$
VWASSOC	Dummy: 1 if village has a <i>mahila mandal</i> (women's association), 0 otherwise
<i>School characteristics</i>	
LUNCH	Dummy: 1 if the school provides a mid-day meal, 0 otherwise
CLASSROOMS	Number of primary classrooms per 100 children aged 6–11 in the village (an indicator of school infrastructure)
WATERPROOF	Dummy: 1 if the school building is waterproof, 0 otherwise
DAYS6	Dummy: 1 if school was open for 6 days out of the past 7 days, 0 otherwise



<i>Variable</i>	<i>Description</i>
<i>NTDUTIES</i>	Number of days spent by the class-1 teacher in non-teaching duties in the preceding 4 weeks
<i>PTCOOP</i>	Index of parent-teacher cooperation, constructed as an unweighted sum of four dummy variables: <i>PATTIT</i> (headteacher considers that the attitude of parents towards the school is “helpful”); <i>PSUPPORT</i> (headteacher approached the parents for help in the preceding year); <i>PCOOP</i> (parents’ response to request for help was positive); and <i>PTA</i> (school has a parent-teacher association)
<i>CTRATIO</i>	“Child-teacher ratio”: number of children aged 6-11 divided by number of teachers appointed in primary sections. The number of children aged 6-11 was calculated as $0.14 * VPOP$, where <i>VPOP</i> is the village population and 0.14 is the 1991 census estimate of the proportion of the population in this age group in the PROBE states
<i>CTRATIO</i> (predicted)	Predicted value of child-teacher ratio, using “distance to nearest road” and “village size” as identifying instruments

Table 5. Binary Logit of Current Enrollment (5–12 years)

Variable	All			Boys			Girls		
	Coefficient	Robust t-value	Marginal effect	Coefficient	Robust t-value	Marginal effect	Coefficient	Robust t-value	Marginal effect
_CONS	-0.279	-0.56	-0.031	1.107	1.57	0.094	-0.692	-1.20	-0.103
AGE5	-2.471	-8.73**	-0.271	-2.758	-6.84**	-0.233	-2.126	-5.25**	-0.317
AGE7	0.129	0.51	0.014	0.292	0.91	0.025	0.092	0.22	0.014
AGE8	-0.204	-1.03	-0.022	0.476	1.52	0.040	-0.678	-2.12**	-0.101
AGE9	-0.233	-0.85	-0.025	-0.168	-0.43	-0.014	-0.197	-0.51	-0.029
AGE10	-0.464	-2.04**	-0.051	-0.221	-0.71	-0.019	-0.788	-2.38**	-0.117
AGE11	-0.610	-2.39**	-0.067	-0.345	-0.81	-0.029	-0.881	-2.41**	-0.131
AGE12	-0.777	-3.18**	-0.085	-0.549	-1.54	-0.046	-1.178	-2.71**	-0.175
EDU_MO	0.128	2.97**	0.014	0.052	1.00	0.004	0.170	2.41**	0.025
EDU_FA	0.114	5.60**	0.013	0.107	3.78**	0.009	0.132	5.10**	0.020
CASLAB	-0.243	-1.11	-0.027	-0.206	-0.74	-0.017	-0.314	-1.13	-0.047
JOB	0.045	0.16	0.005	0.207	0.50	0.017	-0.001	0.00	0.000
ASSET	0.034	3.27**	0.004	0.024	1.08	0.002	0.038	3.62**	0.006
PCCRMS	0.033	0.64	0.004	0.047	0.68	0.004	0.017	0.23	0.003
COWGOAT	-0.044	-1.55	-0.005	-0.011	-0.27	-0.001	-0.076	-2.04**	-0.011
LANDOWN	-0.001	-0.04	0.000	0.011	0.40	0.001	-0.003	-0.14	0.000
DEPEND	-0.208	-1.95*	-0.023	-0.087	-0.52	-0.007	-0.333	-2.22**	-0.050
MUSLIM	-0.107	-0.38	-0.012	-0.282	-0.71	-0.024	-0.103	-0.28	-0.015
SCST	-0.594	-2.73**	-0.065	-0.515	-1.74*	-0.044	-0.802	-2.94**	-0.119
OBC	-0.577	-2.70**	-0.063	-0.500	-1.82*	-0.042	-0.780	-2.98**	-0.116
MOTIV	1.366	6.03**	0.150	1.145	3.66**	0.097	2.033	7.24**	0.303
VVEC	0.132	0.63	0.014	0.155	0.60	0.013	0.075	0.26	0.011
VDEVELOP	0.182	2.36**	0.020	0.069	0.72	0.006	0.244	2.37**	0.036
VWASSOC	0.306	1.17	0.033	0.040	0.13	0.003	0.687	1.97**	0.102
LUNCH	0.092	0.31	0.010	-0.626	-1.61	-0.053	0.998	2.89**	0.149
CLASSROOMS	0.028	0.50	0.003	0.000	0.01	0.000	0.054	0.74	0.008
WATERPROOF	0.586	2.81**	0.064	0.321	1.23	0.027	0.979	3.33**	0.146
DAYS6	0.384	2.19**	0.042	0.015	0.07	0.001	0.747	3.17**	0.111
NTDUTIES	-0.011	-0.58	-0.001	-0.006	-0.30	0.000	-0.016	-0.54	-0.002
PTCOOP	0.047	0.69	0.005	0.044	0.41	0.004	0.056	0.58	0.008
CTRATIO (predicted)	-0.004	-1.80*	0.000	-0.003	-0.92	0.000	-0.005	-2.13**	-0.001
MALE	1.245	7.80**	0.136						
Log L		-915.12			-461.60			-412.76	
Restricted log L		-1,289.95			-613.07			-644.78	
Pseudo R-square		0.2906			0.2471			0.3598	
N		2,472			1,405			1,067	
Mean of dep. variable		0.7840			0.8420			0.7076	