

Primary Schooling in Andhra Pradesh

Evidence from Young Lives School Based Component



S. Galab | P. Prudhvikar Reddy | V. N. Reddy



CENTRE FOR ECONOMIC AND SOCIAL STUDIES
BEGUMPET, HYDERABAD

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Preface

The first World Conference on 'Education for All' was held in Jomtien, Thailand in 1990 with an objective to achieve the global goal of 'Education for All' by the year 2000 or at the earliest. The summit held in New Delhi (December 1993) chalked out strategies to achieve the universal primary education by the year 2000 and also emphasized on removal of gender disparities in primary education, reallocation of resources to basic education and empowerment of local communities to monitor their children's education, etc. Thus the importance of primary education was neglected in India for a long time.

Government of India have realized and willing to improve primary and secondary education by making legislations and planning to cover all the sections in the age group of 6 - 14 years and assuring free education for the deserved. The 10th plan envisaged the need to bridge all gender and social gaps in enrolment, retention and learning achievement at the primary stage by 2007 and reduce the gap to 5% at the upper primary stage. Though girls' enrolment has shown a significant rise during the last few years, the difference in the enrolment ratio between boys and girls continues to exist. It is indeed important to identify the types of schools in which the children are enrolled. The mushrooming of small schools in the recent past coupled with government programmes resulted in reduction in the out-of-school children. The encouraging figures in enrolment have little consequence if considerable number of children fails to complete even middle school.

[Another aspect is, do we have adequate number of qualified teachers to teach? It is equally important that teachers recruited should have some professional training in pedagogy. Apart from these issues teachers should have an ideal atmosphere to teach with sufficient infrastructure and academic facilities. Additionally, functioning of schools should reflect the quality of their outcomes. It is true that there are schools irrespective of the type of the school, functioning well and some are not. There is need to understand the entire gamut of issues of the functioning of such schools to replicate in other schools. For instance, whether involvement of PRIs and other grass-root level bodies such as school management committees and VECs have any impact in improving the elementary education? Quality improvement in schools is linked to many factors including a regular system of monitoring. The Right of Children to Free and Compulsory Education Act may perhaps help in addressing the complex issues in elementary education.

This Monograph has been prepared duly reflecting the entire gamut of issues currently facing in primary schooling in Andhra Pradesh. It is a difficult task to get a unified account of all the complex issues in primary education and we tried to fill this through this monograph. Starting from the basic issues, this monograph attempted to cover all the vital issues including access, infrastructure facilities, availability of qualified teachers, governance issues including the role of community leaders, at one place. Needless to say, any errors that do remain are entirely our own responsibility. I would like to express my sincere thanks to other co-authors of this monograph who have made enormous efforts in bringing this evidence based research piece. I am sure that this research piece will be very useful to the researchers and policy makers.

Director

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Executive Summary

The motivation of the study is to compare the functioning and performance of government schools with private schools and to identify the factors contributing for better functioning and performance to improve the quality of education in primary schools in Andhra Pradesh. The functioning has been captured through school observations on students, teachers, environment, facilities and classroom environment. Qualification, training and experience of headmasters and teachers, governance, role of community, school expenditure, job satisfaction and other details regarding school functioning were also taken into consideration. The performance has been assessed through average and highest marks scored by students in Class V from a selected 227 primary schools in Andhra Pradesh. The main findings are summarized below:

infrastructure and school environment

- A higher percentage of government schools have less than five class rooms and open spaces were used for teaching. Teacher shortage is higher in urban areas and most of private schools have pre-primary education and it is negligible in government schools.
- Government schools are better placed than private schools when it comes to availability of textbooks and maintaining library and having innovation programmes.
- Private schools have an edge in terms of infrastructure, separate room for HM, staff room, internet and facilities like drinking water, Sanitation and cleanliness is obviously better.

* First and second authors are associated with Centre for Economic and Social Studies, N.O. Campus, Begumpet, Hyderabad. Third author is with IBS, Hyderabad and retired Professor, IIM, Calcutta.

- Private schools spend huge amounts on infrastructure development and community involvement is negligible in both types of schools.
- Women form a considerable percentage as Principals and the figure is more in urban areas.
- Post Graduates are more as principals in private schools but trained faculty is more in government schools. Overall teachers working in government schools are better qualified.
- English is taught in private schools from Class I while it is done from Class III in government schools. Majority of private schools offer English medium.
- Private tuitions are higher among urban private students. Parents' involvement is moderate.

Performance of Class V students in final exams

- The performance of Class V students in English, Mathematics, Telugu and Environmental Studies (EVS)¹ has been assessed. Private school students' performance is higher, aided schools are better than un-aided private schools.
- Majority of private schools received A or B grade while the percentage is slightly lower in government schools. Private schools improved grades in 2009-10 when compared to the previous year. Rural government schools received grades in 2009-10 against the previous year. Vacancies were not filled up in all types of schools. The gap between existing strength and sanctioned strength is higher in private schools.
- English as medium of instruction, infrastructure, and attention towards students, easy accessibility and good teachers' qualification are the indicators of a good school.
- Teachers' satisfaction is high in all schools. Higher workload has been their complaint. For government schools it is non-teaching activity and for private schools it is more number of students in a class and lack of parents' involvement.
- The number of working computers per school, annual expenditure on infrastructure and recognition (awards to students) has a significant role for the better performance of Class V students along with the HMs educational qualification and job satisfaction.?

¹The subject of Social Studies was changed as Environmental Studies (EVS) from 2006 onwards.

Education Officers (EOs) views on Primary Education

- Majority of the parents are willing to educate their children, irrespective of caste, community or economic strata, feel Education Officers (EOs).
- There is no gender discrimination while children of tribal communities and migrating labour are facing problems to have access to education. Teacher absenteeism is higher in tribal areas. Special training is needed for teachers in tribal areas. Vacant posts and inadequate support are the reasons for lack of monitoring mechanism.
- Regular monitoring by an exclusive officer improves the situation.
- Special focus should be given to under-performing children.
- Introducing English from primary level is a must and community must be involved to improve the school grades.
- Government schools in mandal headquarters with transport facility will improve the quality of education.
- Teachers should not be entrusted with non-academic work.
- Parents are attracted towards private schools due to English as medium of instruction, more attention, more number of school hours and working day, regular home works, regular parent-teacher meetings, progress cards, extracurricular activities and better infrastructure.
- Publicity of achievements of children in government schools enhances the performance.

CHAPTER-I

Context, Objectives and Methodology

Introduction

Young Lives, an international study on childhood poverty was started in 2001 with the goal of providing evidence for the reduction of childhood poverty². By virtue of its design as a longitudinal study, it is in a strong position to assess the impact of various government initiatives on the children in the context of the Millennium Development Goals (MDGs). It is well known that Goal-2 of the MDGs is to achieve universal primary education by 2015, i.e. boys and girls alike should be in a position to complete full course of primary education. It is well recognized that education in terms of both formal schooling and numerous informal contexts for learning has emerged as the most significant part of children's' lives. However, Young Lives study is largely a household-based survey capturing limited information on education and hence planned a systematic school-based data collection indexed to individual children within the study sample. School-based data as a part of Young Lives study has the potential to answer important questions about children's primary education. There is ample evidence in the existing literature to show that in the context of MDGs and due to the concerted efforts at national and international levels, there is a substantial increase in the enrollment of children (both boys and girls) at the primary level. Evidence shows that in 2010, the global primary completion rate (measured by the gross intake ratio to the last grade of primary education) reached 90 per cent, against 81 per cent in 1999. Regional values ranged from 70 per cent in sub-Saharan Africa to almost 100 per cent in Latin America and the Caribbean and also in the Central Asia. Annual Status of Education Report (ASER) 2012 indicates that at all India level, enrollment numbers remain very high i.e. over 96% of all children in the age group 6 to 14 years are enrolled in schools. At an all India level, the report says, enrollment in private schools has been increasing steadily since 2006 i.e. the percentage of 6 to 14 year olds enrolled in private schools rose from 18.7% in 2006 to 28.3% in 2012. The enrollment in private schools is slightly by

² See Appendix-1 for more details

biased. At present rate of enrollment in private schools, India will have 50% of rural children in private schools by 2018. Evidence clearly indicates faster growth of low fee private schools in the recent past is due to cynicism with the quality and functioning of the government schools coupled with overall economic development (Pratham, 2012 and Woodhead et al, 2012). The positive effect is substantial increase in the enrollment rate at primary level.

Mere achieving universal primary education in terms of enrolment may not be sufficient; rather there is a need for the completion of primary education with quality. ASER reports, year after year, show that reading levels of primary school children continue to be a cause for serious concern. More than half of the children in class-V are at least three grade levels behind where they should have been. For instance, in 2010 nationally, 46.3% of children in Class-V could not read a Class-II level text. Such percentage increased from 51.8% in 2011 to 53.2% in 2012. The reading performance of such children enrolled in government schools is much worse. It has increased from 49.3% (2010) to 56.2% (2011) to 58.3% (2012). Analysis on District Information System for Education (DISE) data on facilities in Primary and Upper Primary Schools in India by National University of Educational Planning and Administration (NUEPA) indicates that many schools in the country are still not equipped with basic facilities. Though many changes took place in education system- due to crowded private players and shelving of many government programmes to improve access and quality of education, we could not achieve improvement in quality of education both in government and private schools. This raises the need for some controls even in the case of the private schools with a vision; otherwise mushrooming of institutions may result in producing low quality education.

Against this backdrop, this monograph attempts to assess the school infrastructure, school functioning as these have a bearing on the access and quality of education besides examining the performance of class-V students in Andhra Pradesh.

Objectives

The specific objectives of the monograph are as follows:

- i) To assess the status of school environment and infrastructure in the primary schools of Andhra Pradesh across rural and urban areas by school type
- ii) To examine the profile of Principals/Head Masters and Math Teachers working in primary schools, decision making process and interaction of various committees (both official and non-official) relating to the school functioning in rural and urban areas by type of school

- iii) To study the performance related factors of class-V school children in rural and urban areas by type of schools in the state of Andhra Pradesh and
- iv) To critically examine the views of education officers on the issues related to primary education.

Methodology

As stated earlier, Young Lives is largely a household survey based study with limited information on functioning and performance of educational institutions. As a part of it a systematic school-based data on individual children were collected. The entire sample design is centered on the cohort of younger children³. The process of sampling of the schools is as follows:

- Created a list of younger cohort children still enrolled in school according to the young lives Round-3 data (collected in 2009-10) ordered by the characteristic on which we wanted to stratify. Similarly, younger cohort children attending the schools are stratified to accommodate required number of private/public schools.
- Thus index children have been divided into different strata (groups)⁴.
- A random sample of children in each stratum has been adopted to get the required number of children in each stratum.
- Got the list of schools attended by these children.
- This gives the list of schools and grades to survey for the sample.
- We finally figured out the actual classrooms in which the index children are when we visited the schools, because we don't know which class/section children are in young lives round-3 data which is available with us.

This is the same as if we take a random sample of schools attended by Young Lives children weighted by the number of children in the school (i.e. with probability the school is sampled proportional to size, where size is the number of Young Lives children in the school).

- If children have migrated into another Young Lives site we have considered these children for selection of schools.

³ For the Young Lives methodology see Appendix-2

⁴ A random sample may not include enough group members to facilitate analysis of that group. The stratified sample design is used to select children of different characteristics

- If children live in a Young Lives site but going to the school which is outside that site/district, we have included in the sample if the school is close enough to the site to visit during the field visit.
- If we noticed that sample children are dropouts, then replaced with other Young Lives child of similar characteristic within the site at random.

Thus the sample design of the present research on schools and the children is different from the normal selection process. But the advantage of the present research is the availability of household characteristics of the sample children studied in the main Young Lives study which may facilitate to do a robust statistical analysis linking the performance of children to the household characteristics. Number of sample schools across districts, number of Young Lives sample children attending these schools and number of children studying in sample schools are given in the tables below.

Table 1.1: Number of Sample Schools across Districts in Andhra Pradesh

District	Rural			Urban			Total			All
	Govt	Private		Govt	Private		Govt	Private		
		Aided	Unaided		Aided	Unaided		Aided	Unaided	
West Godavari	8	-	3	6	-	8	14	-	11	25
Srikakulam	26	2	5	2	1	14	28	3	19	50
Kadapa	8	-	9	.	-	8	8	-	17	25
Ananthapur	15	-	3	4	-	9	19	-	12	31
Karimnagar	4	3	1	5	-	6	9	3	7	19
Mahaboobnagar	17	1	12	-	2	6	17	3	18	38
Hyderabad	1	-	2	1	2	16	2	2	18	22
Non-YL Districts	2	-	3	1	4	7	3	4	10	17
Total	81	6	38	19	9	74	100	15	112	227

Note: Govt=Government

Source: School based survey as a part of Young Lives study

Organization of the Study

The study is organized into six chapters.

The Zero Chapter presents an Executive Summary of the major findings of the study and the policy implications of these findings.

The First Chapter deals with the context, objectives and methodology of the study. In the Second Chapter, the analysis relating to school environment and infrastructure in the primary schools of Andhra Pradesh is presented. The analysis on the profile of

Table 1.2: Number of Young Lives Children Studying in Sample Schools in Andhra Pradesh

District	Rural			Urban			All		
	Govt	Private		Govt	Private		Govt	Private	
		Aided	Unaided		Aided	Unaided		Aided	Unaided
West Godavari	38		3	9		30	47		33
Srikakulam	155	9	37	4		32	159	9	69
Kadapa	46		64			2	46		66
Ananthapur	142		31	7		31	149		62
Karimnagar	19	15		6		30	25	15	30
Mahaboobnagar	167	8	87				167	8	87
Hyderabad			1	2	4	40	2	4	41
Non-YL Districts	3	1	4		3	7	3	4	11
All	570	33	227	28	7	172	598	40	399

Note: Govt=Government

Source: School based survey as a part of Young Lives study

Table 1.3: Number of Children Studying in Sample Schools across Districts in Andhra Pradesh

District	Rural			Urban			Total		
	Govt	Private		Govt	Private		Govt	Private	
		Aided	Unaided		Aided	Unaided		Aided	Unaided
West Godavari	556	-	905	524	-	4637	1080	-	5542
Srikakulam	1540	249	913	164	162	5031	1704	411	5944
Kadapa	241	-	1774	-	-	1836	241	-	3610
Ananthapur	1159	-	1042	358	-	2509	1517	-	3551
Karimnagar	216	803	350	804	-	1682	1020	803	2032
Mahaboobnagar	1955	98	3292	-	960	2028	1955	1058	5320
Hyderabad	63	-	299	106	353	5901	169	353	6200
Non-YL Districts	315	-	566	345	1141	2094	660	1141	2660
Total	6045	1150	9141	2301	2616	25718	8346	3766	34859

Note: Govt=Government

Source: School based survey as a part of Young Lives study

Principal/Headmasters and Mathematics teachers, decision making process and interaction of various committees including teachers with regard to School Management is dealt with in the Third Chapter. The analysis relating to performance of Class-V school children in rural and urban areas by type of school in the state of Andhra Pradesh and interrelated factors related to performance is presented in the Fourth Chapter. Determinants of the performance of students in Class V in their final examinations are discussed in the Fifth Chapter and the last chapter deals with the perceptions of Education Officers (EOs) on the issues related to Primary Education.

CHAPTER - II

School Environment and Infrastructure in the Primary Schools

In this chapter, we try to capture the status of infrastructure and the environment under which the school is functioning. Adequate number of class rooms, provision for drinking water, separate toilet facilities for boys and girls, availability of playground, boundary wall for school etc. are the basic infrastructure needs of a school which contribute to the overall learning atmosphere. School environment and infrastructure have been captured through the school observation method and information from the Principals/Head Masters of the respective schools. This information is vital to assess the performance of students.

Strength of students and teachers

On an average, there are about 80 students per government school up to Class V as against 302 students in private school. Rural - urban variation is discernible and per-school strength is higher in the case of urban areas both in the case of government and private schools. Similar variation between rural and urban and between government and private schools is noticed in the case of number of teachers per school (Table 2.1). Teacher - student ratio indicates that there are about 29 students per teacher in private schools irrespective of rural or urban areas in contrast to 21 - 28 students per teacher in the government schools in the rural and urban areas. Private schools have more number of rooms per school (11) as well as more number of teachers per school (10.43) as compared to the government schools (3 teaching rooms and 3.5 teachers per school). The average number of students per school in the government and private schools in the rural areas are in the ratio of 1:3.5 and in the urban areas are 1:2.75. The average number of teachers per school in the government and private schools are in the ratio 1:3. Thus urban areas are better placed in terms of student and teacher strength both in government and private schools. However the existing literature shows different scenario (Goyal and Pandey, 2012, Nambissan, 2012)⁵.

⁵ Private schools differ considerably in the types of students who attend even within the same district or village. Private and government schools do not differ in physical facilities but private schools have lower pupil-teacher ratio. The other research outputs reviewed show that government primary schools

School infrastructure

Classrooms are not adequate to teach primary classes I to V. Hence, verandahs and open space are supplemented for classroom teaching. Verandahs are used for teaching in about 59% and 28% of the government schools in the rural and urban areas respectively. The corresponding figures for private schools are 12% and 8% respectively. Teaching in open space is prevalent in about 20% of the rural schools irrespective of government or private schools and in about 6% of the urban private schools (Table 2.1).

Almost all the private schools, irrespective of their location, are having more than five classrooms per school for teaching purpose. Nearly 10 per cent of the government

Table 2.1: Location, Size, Teacher Strength and Physical Infrastructure Facilities in Primary Schools

Basic features	Government			Private		
	Rural	Urban	All	Rural	Urban	All
Number of Students up to Class-V per school	72	121	80	247	332	302
Number of Teachers per school	3.40	4.42	3.53	8.62	11.35	10.43
Teacher-Student Ratio	21	27.5	23	29	29	29
Number of rooms per school	3	4	3	9	13	10
Percentage of schools using verandah for teaching	59	28	55	12	8	11
Percentage of Schools using open space for teaching	21	0	17	20	6	11
Average age of schools (years)	42.40	50.84	44.0	10.55	17.00	14.77
Facility indices*	0.23	0.30	0.24	0.50	0.58	0.55

* Facility indices include separate rooms for HM, staff, library, storage of teaching material, covered place for assembly and play ground.

Source: School based survey as a part of Young Lives study

that cater to the poor in rural areas and in urban slums and shanties are poorly equipped in relation to basic infrastructure, resources and teaching staff (Chugh (2012). Tooley (2009) from Hyderabad based study summarized as: private unregulated budget schools are run at low cost - with a minimum infrastructure and resources and teachers on contract who are paid a fraction of the salaries that their counterparts in government schools receive. Baird (2009) and Joshi (2008) who have reiterated Tooley's findings especially on the aspiration of poor, infrastructure and that student in low cost schools outperform those in government schools. However, these studies are not free from criticism on the lack of conceptual clarity, faulty methodology and hence offer a weak body of evidence (Rose and Dyer 2008, Sarangapani and Winch 2010).



schools located in the rural areas having three classrooms per school and another 10 per cent are having four classrooms per school for teaching purpose. This indicates that on average private schools are having at least one classroom per class though one has to be cautious in interpreting as the need depends upon the student strength. But the results indicate that around 20 per cent of rural government schools are deprived of having one classroom per class.

With regard to facilities like separate Head Master room, separate staff room, separate library, separate place to store teaching materials, covered space for assembly and playground, we find private schools are better placed when compared to government schools. The indices of such facilities are 0.24 and 0.54 for government and private schools respectively. That is, on an average, about 24% and 54% of the government and private schools respectively possess above mentioned facilities. The facility indices in rural and urban areas are given in Table 2.1.

We find government schools are better placed than private schools with respect to the availability of books other than text books and arranging the library books in separate cupboards. About 55% of the government schools in rural areas indicated that books offered to be in use as compared to 33% of private schools while it is reverse in the urban areas. The existing literature indicates that some of the government schools are responding to the competition of local private schools and vice versa in terms of infrastructure (Chudgar 2012)⁶.

Structure of classrooms

Higher percentage of government schools have pucca structure (more than 80% in rural areas and about 75% in urban areas) as compared to private schools (more than 50% in rural areas and about 68% in urban areas). However, schools having pucca and or semi-pucca class room structures account for about more than 95% in both government and private schools in both rural and urban areas. We find about 10% of government schools in rural areas and 5% of schools in urban areas do not have classrooms either for Class-1, Class-2 or Class-5. Also, we noted that average number of rooms per school in Government schools is 3 and 4 in rural and urban areas respectively. As a result, we find that conducting of classes for different levels / grades in the same classroom

⁶ The study specially looks at villages with private schools and compares the difference in performance of private and public schools children in such villages. The study covering 1,31,553 children from 6,836 villages in 575 districts from 31 states and union territories from Annual status of education report 2009, found that Government schools have more resources. Government schools actually perform better in the villages that have more robust government investment and presence. Public schools may respond to private competition, or they may simply respond to greater Government support. Private schools may respond to the presence of robust government funded services and infrastructure.

(sharing) is prevalent in about 82% of the government schools in rural areas and in about 63% of the government schools in urban areas. The corresponding figures for private schools in rural and urban areas are 16% and 8% respectively. Due to shortage of classrooms for teaching, we find that sharing of classes in classrooms is prevalent in both government and private schools. This phenomenon is highly prevalent in government schools as compared to private schools.

Age of schools

About 10% of the private schools surveyed are branch schools. In terms of the age of the schools, government schools are much older compared to private schools. In brief, government schools irrespective of their location are 42-51 year old, while private schools are 11-17 year-old indicating the growth of private schools is in the recent past⁷. Merely 2% of the private schools in both rural and urban areas provide just hostel (for residence only). The results indicate that almost all the schools offer grades 1 to 5.

Medium of instruction

More than 95 % of the Government schools have single medium of instruction. In the case of private schools, all schools in SC/ST/OBC colony, 33% of schools in rural other areas and 22 % of urban private schools have two official medium of instructions. Little over 95% of the Government schools in rural areas offer Telugu as first medium of instructions compared to 84% in the urban areas. On the other hand, English is offered

⁷ *Goyal and Pandey* (2012) review of existing literature shows that: 25% of all enrolment in primary education is in private schools (SRI 2005; Mehta 2006). Nearly 30% of villages have access to a private school within the village itself (Kremer and Muralidharan 2006 and De et al 2002). Ross Baird, (2009) study covering Hyderabad and Mumbai indicates that private schooling in India is demand-driven. Supply-side factors have little statistical relationship to private schools. There is no statistical relationship between a particular region's wealth and private enrollment. Private schools in India are as likely to exist in poor areas as rich ones. *Asadullah and Yalonetzky*, (2012) study show, that there is a weak association between financial allocations and ensuring equality of opportunities across sections of the population in India. Dixon's (2010) study revealed that generally private unaided schools are contributing significantly to India achieving the target of education for all. With the introduction of the RTE comes an opportunity to stimulating the efficiency and effectiveness of private unaided schools, through a new regulatory model. This paper has set out some examples where self regulation and self evolution currently operate. A self regulatory and evolution strategy could be one way forward for improving and monitoring the quality of private unaided schools in India, moving regulatory authority from the state to private interest groups. Sam Hill, and Chalaux (2011), study found that high dropout rates and low attendance continuous to be a challenge at lower levels and enrollment at higher levels remains modest by international standards. The private sector involvement is on the rise. This study suggests that the need for effective quality assurance mechanisms is particularly strong in India given the expansion of private providers. The government is moving to mandatory accreditation system and opening the market to new accreditation agencies, which should improve the coverage.

as first or second medium of instruction in about 86% of the private schools. 20% of the rural private schools and 5% of the urban private schools offer Telugu as first medium of instruction. Over 90% of the private schools have pre-primary education in their campuses as compared to about 5% of government schools. Shift system is prevalent only in about 5% of the rural private and urban government schools and the same teachers teach in both the shifts.

Innovative Programs

The study also gathered information on the innovative programmes followed by the schools such as having post box (to receive complaints), wall magazines, honesty box, children's committee, children's diary, and teacher's diary etc. An index has been generated to assess the presence of these programmes or otherwise. Index of innovative programmes is defined as the average score (response) of items Post box, wall magazine, honesty box, children's committee, children's diary and teachers' diary. If all these facilities are present in a school, then the value of the innovative programmes index for that school would be 1. Results indicate that government schools are substantially better off compared to private schools in having innovation programs (Table 2.2).

Table 2.2: Index of innovative programmes

Location of school	Government	Private
Rural	0.83	0.45
Urban	0.87	0.50

Source: School based survey as a part of Young Lives study

On the average more than 85% of the government schools have innovative programs as against 50% of the private schools.

Functioning of available facilities

Functioning of facilities available (indices) in private schools is better than that of the government schools in both rural and urban areas. For instance, First Aid kit is available and functioning in about 87% of the private schools as compared to 63% of government schools. Similar differences are found in rural and urban areas (only 43% of government schools in urban areas have First Aid kit). Playing material kit, sports kit, music kit and art material and craft kit are functioning in relatively higher percentage of private schools as compared to government schools both in rural and urban areas. Musical instruments such as radio/tape recorder, DVD player and television are also in working condition in relatively higher percentage in private schools as compared to government schools, both in rural and urban areas. Computers for staff and students are available in more than 50% of the private schools in both rural and urban areas. Internet facility is also available in about 47% and 16% of the private schools in urban and rural areas respectively. Such facilities are nearly absent in government schools (Table 2.3).

School bell is available in almost all the schools. School telephone/mobiles for 100 private schools are 87 and 71 in the urban and rural areas whereas the corresponding figures for government schools are 32 and 8 respectively. The working computers available for 100 private schools are 873 and 183 in urban and rural areas respectively, whereas for 100 government schools the availability of computers is 38 and 3 in urban and rural areas respectively.

Table 2.3: Computer and Communication Facilities in Schools

Facility	Government			Private		
	Rural	Urban	All	Rural	Urban	All
No. of working computers for 100 schools	3	38	10	183	873	634
Average number of working computers per school	0.04	0.31	0.91	0.75	2.62	1.96
Percentage of schools with internet facility	-	-		16	47	36
Percentage of schools with communication facilities*	33	32		42	43	43

* Include TV, Tape recorder, DVD etc.

Source: School based survey as a part of Young Lives study

About 58% of the government schools have a secured compound wall compared to about 89% of the private schools. Similar differences are observed for schools in the rural and urban areas. Electricity connection is available in about 96% of the private schools compared to 76% in the case of government schools. Alternate source of power supply is available in about 25% of the private schools and similar facility is nearly absent in government schools. Drinking water facility is available in about 96% of the private schools irrespective of the location of the school (rural or urban) compared to 72% for government schools. It is about 68% in the case of rural government schools compared to 95% of the urban government schools. Drinking water is supplied through Taps.

Student and Teacher Amenities

About 11% of the private schools in urban areas do not have chairs for class teachers. In all other categories of schools in rural and urban areas about 4% do not have chairs for class teachers. Similarly staff room does not have chairs in about 11% of the schools. More than 70% of the schools under private management do not have tables for teachers as compared to little over 40% in the government schools. Almost all the government schools do not have desks for students, while in case of private schools it is about 80% in rural areas and about 40% in the urban areas. Similar trend is observed in the case of benches/chairs for students. It is similar in the case of cupboards (almirahs) / boxes to keep record.

Sanitation Facilities

Almost all private schools in urban areas have sanitation facilities and within the school premises. In case of rural private schools the corresponding figure is 76%. In the case of government schools the corresponding figures are 79% and 65% in the urban and rural areas respectively. Boys and girls from more than 45% of the government schools indicated that non-functioning of toilets is one of the main reasons for not using toilets. Full privacy is available for girls' latrines in only about 54% of the government schools in the rural areas⁸.

Mid-day Meal

Almost all government schools provide mid-day meals to the students while only 5% of the private schools are providing such facility. Food for mid-day meals is cooked both within and outside premises in equal percentage number of schools. Most of the children in all the government schools take mid-day meals. The cooked food is served to children by either ayah or cook.

School Management

Principals arrive on time to schools in about 90% of the schools in urban areas as compared to 80% in rural areas. Principals from more than 90% of the schools continued to stay at the end of the day. Most of the Mathematics teachers in private schools arrive in time and will be present at the end of the day. Similar phenomenon is observed in about 85% of the government schools. Teachers arrive on time in about 80% of the government schools compared to 97% in private schools. Similar phenomenon is observed regarding the teachers present at the end of the day. In almost all the schools, children are present at the end of school time. Majority of the children arrive on time in about 82% of the government schools and in almost all private schools. Classes in session without teacher were observed in 46% of the government schools as compared to 22% in private schools. Conducting remedial classes for Mathematics was observed in about 5% of the private schools compared to about 25% in the government schools.

School maintenance

Almost all private schools are well maintained as compared to 81% of the government schools. School rules / slogans / mottos are displayed in the school compound in about 64% and 45% of the government and private schools respectively. About 96% of the private schools require students to wear uniforms as compared to 60% in the case of government schools. Almost all children wear uniform in about 80% and 24% of the

⁸ However, NUEPA study (2011) indicate Improvements in girls' toilets have been remarkable over the years but as on 2009-10, there are 4.7 lakh schools deprived of girls' toilets; 0.7 lakh schools require drinking water; 5.4 lakh schools require boundary walls; 5.4 lakh schools require play grounds and 4.9 lakh schools require additional classrooms.



private and government schools respectively. Girls only clean classrooms in about 96% and 47% of the private and government schools respectively and whereas boys only clean 30% and 4% of the government and private schools respectively. Cleanliness of different parts of the schools is observed in more than 95% of the private schools as compared to about 80% of the government schools. School bell or siren or drums is sounded in between periods in almost all the private schools and in more than 70% of the government schools. Time table/class schedules in class room is posted in about two-thirds of the schools. Breeding grounds for mosquitoes in schools premises is found in more than 80% of the government schools as compared to about 29% in the case of private schools.

Student health and well-being

Health cards are issued for the students in about 66% of the government schools as compared to only 11% of students in private schools. Regular yearly health check-ups are provided for the children at the school every academic year in about 62% of the schools. Health check-ups were done for the children in the school during last one year in about 77% of the schools. Health check-ups include vaccinations, growth monitoring, vitamin supplementation and de-worming. Each of them was performed in more than 50% of the schools. A doctor conducted health check-ups in about 71% of the private schools compared to 35% of government schools whereas a nurse conducted health check-ups in about 57% of the government schools compared to 21% of the private schools. The health topics such as sanitation and hygiene, safe drinking water, prevention of diseases and safety are part of the primary curriculum in almost all government and private schools.

School timetable and extra-curricular activities

In almost all the schools, children assemble for about half an hour in the morning for prayer/news reading. Average number of school periods per day is seven and average duration per period is 45 minutes in all the categories of schools. On an average, 75 minutes is the average duration of break time in a day in all categories of schools. About 94% of the government school Head Masters (HMs) indicated that they have received an academic calendar from higher officials for this school year compared to 63% of the private school. More than 70% of the HMs indicated that they precisely follow the academic year calendar and another 25 % indicated that they follow it to some extent. Those schools that did not received academic calendar from higher officials made their own school timetable. In a normal school day, the HMs of government schools on the average spend about 67 minutes on administrative work compared to 150 minutes by private school HMs. About 96% of the schools offer sports/games during the school hours. Offering music/dance/drama during school hours was noticed in about 61% of

the private schools compared to 46% by government schools. Similarly, about 46% of the schools offer Art/Craft during school hours.

Educational / recreational trip during last three years

Distribution of schools undertaking educational / recreational trip during the last three years indicate significantly higher percentage in private schools (rural 71% and urban 81%) than in government schools (rural 45% and urban 47%).

School Disruption

During the academic year 2009-10, the government schools were disrupted and closed for about 5 days compared to 10 days by the private schools. The important reasons for the closure were local holidays and bandhs /strikes. About 44% of the school HMs indicated that the more absenteeism of students was in specific months in the academic year 2009-10. The specific months when there is a drop in attendance being planting and harvesting time, extreme weather conditions, health problems and local festivals.

Student access/retention/repetition/support

Almost all students who applied for a seat, got admission to government schools compared to 82% in the case of private schools. The main reason(s) for not applying to government schools is that they do not offer English medium and for the private schools the reasons are location and school fee. About 17% of the students in private schools are from influential families compared to about 7% in government schools. The important reasons for children who have repeated during last year are poor attendance, poor performance and parental choice. The main methods used to allocate students to a particular section are random (first come first serve), ability in some subjects and ability in all subjects. About 77% of the private schools provide extra classes outside formal school hours within the school premises compared to 25% of the government schools. Only about 6% of the private school HMs indicated extra fee for extra classes outside the school hours within the premises.

Community Support

We tried to capture the support received by the school (for midday meal, uniform and for infrastructure) from the community during the year 2009 - 10 and the data show that only 9% of the Government schools and 2% of the private schools received from the community support in the form of goods in the case of Government schools and cash in the case of private schools for mid-day meal. Similarly, only 5% of the Government schools and 4% of the private schools got support from the community towards free uniforms/ free pens for the children studying in their schools. Only 2% of the rural schools got community support for infrastructure and its maintenance.

School Expenditure

Almost all the schools keep annual accounts/ records of income. The accounts are available for public scrutiny in more than 90% of the Government schools and in about 40% of the private schools. Further the accounts are regularly audited in almost all the Government schools and in about 80% of the private schools. About 51 % of the private schools pay rent for the premises and the average rent per month is about Rs 13878/-. We find that more than three-fourths of the private schools spend significantly higher amount on equipment and furniture during the last academic year compared to government schools both in rural and urban areas. Average expenditure incurred on equipment per school is substantially higher (7-10 times) in private schools compared to government schools (Table 2.4).

Table 2.4: Expenditure Pattern on School Amenities

Item of Expenditure	Government		Private	
	Rural	Urban	Rural	Urban
% of schools incurring expenditure on equipment	58	47	74	81
Average expenditure on equipment per school (Rs)	3479	3289	23191	32841
% of schools incurring expenditure on computers	1	0	50	64
Average expenditure on computers per school (Rs)	4000	-	40261	45389
% of schools incurring expenditure on Text books	5	5	44	40
Average expenditure on Text books per school (Rs)	2275	2500	26385	16719
% of schools incurring expenditure on school material	55	53	31	27
Average expenditure on school material per school (Rs)	1934	1600	13950	8448
% of schools incurring expenditure on new buildings	19	32	39	22
Average expenditure on new buildings per school (Rs)	317875	568333	687500	832631
% of schools incurring expenditure on renovation	28	11	46	42
Average expenditure on renovation per school (Rs)	8303	6500	44476	61681
% of schools incurring expenditure on sanitation	24	37	46	59
Average expenditure on sanitation per school (Rs)	7852	15218	28024	38640
% of schools incurring expenditure on drinking water	27	21	63	55
Average expenditure on drinking water per school (Rs)	5036	5200	20414	31454

Source: School based survey as a part of Young Lives study

Expenditure incurred on computers during the academic year 2009-10 reveal that more than 50% of the private schools have spent money on computers. The average expenditure incurred per private school was about Rs. 43,338/- Practically there was no such expenditure in the case of government schools.

This indicates that the private schools are incurring substantial amount in developing equipment and computers. We find that higher proportion of private schools spend significantly higher amount per school on textbooks. However, one should note that in the government schools, text books are supplied free of cost.

Notebooks, pens and other school material for children: We find higher proportion of government schools spend money on notebooks, pens and other school material for children compared to private schools. But the average expenditure incurred per school by government schools is smaller when compared to private schools. This fact may be due to substantially smaller number of students per government schools vis-à-vis private schools.

With regard to development plans in vogue, about 90% of the Government schools have development plans as compared to 83% of private schools. Similarly 99% of the Government schools have school management committees compared to 86% of the private schools. Same is the case with having Parent Teacher Associations.

Relatively smaller proportion of government schools incur expenditure on construction of new buildings compared to private schools in rural areas and it is simply the reverse in the case of urban areas. However, the expenditure incurred on this account per school is substantially higher in the case of private schools both in the rural and urban areas.

We also note that relatively higher proportion of private schools incurring expenditure on renovation of building compared to government schools both in the rural and urban areas. Also the average expenditure incurred on renovation is substantially higher by the private schools compared to government schools in both the rural and urban areas. It is almost 5 to 10 time higher than the government schools and hence the environment in most of the private schools looks neat.

With regard to expenditure on sanitation and drinking water facilities during last three years, we note that relatively higher proportion of private schools incurring expenditure compared to government schools in both the rural and urban areas. Also the average expenditure incurred on sanitation facilities is substantially higher by the private schools compared to government schools in both the rural and urban areas.

We also noticed that the average number of students per private school exempted from school fees was about 30 during the last academic year. School pays the fees for about 80% of such students who are exempted from the school fees. NGOs pay for 4% of the students and private persons pay for 4% of such students. Predominant criteria for the exemption of school fees are economically poor, academic potential / results followed by SC and ST.

Sum up

- ❖ Rural-urban variations are clearly visible whether in government or private schools. Though teacher-student ratio is on acceptable lines, private schools have an edge when it comes to number of classrooms, and number of teachers per school. While Telugu is preferred in rural areas it is English that is first or second medium of instruction in urban areas.
- ❖ Private schools have pre-primary education which lacks in government schools, but the latter are better placed in having innovation programmes.
- ❖ Private schools better facilities for students and privacy for the faculty, while open spaces are used by government for teaching. However, Government schools are better placed when it comes to library and its upkeep. The percentage is higher in private schools when it comes to the availability of First Aid kits and other facilities including drinking water and secured compound wall.
- ❖ More number of Government schools have pucca building structure than private schools. Non availability of tables to teachers is more prevalent in private schools than in government schools. Nearly half of the toilets in government schools are not in proper shape. Private schools spend more money on sanitation and environment in most of the schools is neat.
- ❖ When it comes to timings of the faculty, it is better in private schools. Cleanliness is on the higher side (80 +) in both types of schools and government schools outshine private schools in displaying slogans and mottos.
- ❖ Water logging, breeding ground for mosquitoes, is more prevalent in government schools, though over 60 % of the students have health cards against 11 % in private schools. Private schools undertake more number of educational and recreational trips in a year.
- ❖ Parents do not prefer government schools as there is no English medium while they shun private schools due to higher fees structure. Students repeat classes due to lack of attendance or on parental advice.
- ❖ Community support is negligible in both types of schools while accounts are available for public scrutiny in government schools unlike private schools. However, Private schools spend more on acquiring equipment.

CHAPTER - III

Functioning of Primary Schools

Besides infrastructure, there are a few common factors that are essential for better results in education. Teachers are the key change agents in schools. Ensuring their competence through better qualifications and training reflect in the performance of the students in the schools. In addition to this, leadership qualities of the Headmaster are also seen as an important factor in building better school atmosphere.

In this chapter, an attempt is made to understand the profile of the headmasters and Mathematics teachers as a symbolic representation of teachers and their qualifications and role in the school matters. In addition to this interaction of officials and non-officials through various committees/associations in the functioning of school in government and private schools, rural or urban is equally important.

Profile of the Principal/Headmaster

Average age of Headmasters in private schools (42 years) is lesser than that of the same (49 years) in government schools in urban areas. In the case of rural areas, the average age of a headmaster is about 41 years. In private schools, 37% of the Headmasters Principals are women as compared to 28% in government schools (Table 3.1). However, in urban areas, 58% of headmasters in government schools are women. Educational qualification and training play an important role in the quality of teaching. Data shows that 56% of the headmasters in private schools possess Masters Degree as the highest qualification as compared to 33% of headmasters in government schools. 20% of the headmasters in the government schools possess higher secondary as highest qualification as compared to 4% of the headmasters in private schools. About 17% (20% in rural and 15% in urban) of the headmasters in private schools do not have any training while

78% of them possess B.Ed. and a higher Degree, compared to 63% of the headmasters in government schools. About 36% of the headmasters in government schools possess Diploma in Education as compared to 5% of the headmasters in private schools. 17% of the headmasters in private schools do not have any specialization as compared to 28% of headmasters in government schools. Environmental Studies (EVS), (34%), Science (14%), Mathematics



(13%) and English (12%) is in the decreasing order of specialization of headmasters. 23% and 15% of the headmasters in rural and urban areas respectively are currently registered for higher studies. Almost all the headmasters have studied English as a formal subject. About 92% of the headmasters of private schools studied English as a formal subject at Degree and above as compared to 74% of the headmasters in government schools.

Table 3.1: Number of Head Masters and Math Teachers Working Across Government and Private Schools

Category	Government			Private			All		
	Male	Female	All	Male	Female	All	Male	Female	All
Rural									
HMs	71	20	91	40	11	51	111	31	142
Math teachers	124	59	183	40	34	74	164	93	257
Urban									
HMs	8	11	19	49	40	89	57	51	108
Math teachers	7	13	20	22	102	124	29	115	144

Source: School based survey as a part of Young Lives study

With regard to the social composition, Headmasters belonging to BC and OC categories account for more than 95% in private schools, irrespective of the location, rural or urban. About 85% of headmasters' mother tongue is Telugu and around 95% of the headmasters in private schools can write letters in English as compared to 80% in the government schools. We have also elicited information on the number of children (below 14 years of age) the headmasters have expecting them to be child sensitive in the management of the schools. In addition it may be interesting to know if the children of these headmasters and Mathematics teachers are studying in the same school where they are working.

Around 42% of the headmasters from urban areas have the same native place as compared to 18% of the headmasters in rural areas. 26% of the headmasters from rural areas stay in the nearby towns. However, it is revealed that number of days encounter problems (due to local strikes) while traveling to school in a year is negligible.

Service details

Service, salary, in-service training, and membership in the Teachers' Association play a role in the school management and also quality of teaching. Headmasters of government schools are relatively older when compared to the headmasters of private schools. However, headmasters working in urban areas, irrespective of the location of school are more experienced as headmasters (Table 3.2).



**Table 3.2: Headmasters' Experience (Total service)
Across Type and Location of the School**

	Government	Private
Rural	4 (16)	7 (14)
Urban	8 (24)	9 (16)

Note: Figures in the parentheses correspond to total service

Source: School based survey as a part of Young Lives study

Training facilities are better for government school headmasters as compared to private school headmasters. 89% of the headmasters in government schools are members of Teachers' Association as compared to 20% of the private school headmasters. However, private school headmasters are relatively active in the Association.

We find substantial differences in the salaries of the headmasters of government and private schools. The monthly salary of a headmaster in a government school is three times higher than that of the monthly salary of a headmaster of private school. In most of the schools salary is paid on time every month (Table 3.3).

**Table 3.3: Headmaster's Monthly Salary and Other Household Income
Current gross salary of headmasters per month (Rs.)**

Location of the school	Government	Private
Rural	21963	7458
Urban	28955	10516
Other benefits of headmasters per month (Rs.)		
Rural	11	475
Urban	0	498
Average Gross household income (Rs.) of headmaster per month other than salary		
Rural	6577	7378
Urban	14499	9923

Source: School based survey as a part of Young Lives study

Incentives for the headmasters

Rewards/incentives received for good performance during the last three years indicate that 27% of the headmasters working in the SC/ST OBC colony managed by the Government received rewards and incentives. In some cases the rewards are in the form of promotion in the rural areas and recognition in the urban areas (Table 3.4)

Table 3.4: Percentage of headmasters receiving rewards / incentives in the rural and urban areas

Location of school	Government	Private
Rural	19	12
Urban	16	20

Source: School based survey as a part of Young Lives study

Curriculum

Curriculum followed in the schools is vital in deciding the access factor and in turn defines quality of education. Our study shows that 99% of the private schools teach English compared to 84% by government schools. 92% of the private schools start teaching English from Class I onwards compared to 97% of the government schools start teaching English from Class III. About 82% of the private schools offered English medium in the academic year 2009-10 compared to none by the government schools. Private schools offered English medium in all the classes during 2009-10. It is interesting to note that 80% of the government schools indicated that lack of permission from the higher authorities is the main reason for not offering English medium in the schools in Classes I to V. 79 % of the government schools indicated that they would like to offer English medium if it were possible.

Almost all government schools follow SCERT syllabus compared to 77% of the private schools. 64% of the government schools are aware of the National Curriculum Framework (NCF) 2005 compared to 25% of the private schools. With regard to training in NCF, 53% of the government school HMs received training at NCF as against 7 % of private school HMs. More than 90% of the schools have a copy of the syllabus for each class and subject that can be consulted.

Almost all the Headmasters indicated that, except English, all the subjects are either highly relevant or relevant and they are manageable or easy. In the case of English about 35% of the government school HMs indicated that it is not relevant and 54% of government HMs indicated that it results in overloading. It is worth noting that about 40% of the private schools use government textbooks, and around 22% use private textbooks and the remaining private schools use partly private and partly government textbooks. All the government schools receive textbooks from the government while 11% of the private schools also reported receiving textbooks from the government. With regard to the timely supply of text books, all the private schools and more than 90% of the government schools received Mathematics, Telugu, English and Environmental science textbooks before July 30th. All the government schools receive the above books free of cost, whereas only 33% of the private schools receive the books free.

More than 95% of the schools use marks and grades to report children's academic achievements. About 67% of the schools demonstrate children's performance before parents. 97% of the private schools and 80% of the government schools send progress reports to parents. The new comprehensive continuous education format is being followed by about 87% of the government schools and 47% of the private schools. Almost all government schools and only about 8% of private schools have Snehabala

Cards⁹ as a teaching tool. 72% of the government school HMs reported that Snehabala Cards are very useful and about 24% of the government school HMs reported Snehabala Cards are useful to some extent.

Decision Making

School is the main decision maker for allocation of school grant to different purposes in more than 80% of the government schools. Mandal education office and / or district education office are also the main decision makers according to some of the Government schools. Regarding the allocation of locally collected money to different purposes, school is usually the main decision maker in most (76%) of the Government and private schools. School is the main decision maker in the private schools with respect to: (i) Number of teachers to be hired, (ii) Selection of teachers, (iii) Selection of vidya volunteers and (iv) Teachers' dismissal. Mandal Education Officer (MEO), District Education Officer (DEO) and State Education Department are the main decision makers in the case of government schools for the above mentioned factors (i) to (iv).

Regarding infrastructure improvement, school is the main decision maker in about 84% of the private schools compared to 55% of the Government schools. Department officials at mandal, district and at state level are the other decision makers in the case of Government schools. School and district education officers are the main decision makers in most of the private schools in the case of examination schedule whereas MEO, DEO and State Education Department are the main decision makers in most of the Government schools.

With respect to student repeating the class, the school and parents/PRI/ community are the main decision makers in most of the private schools whereas the school, MEO and parents/PRI/community are the decision makers in most of the Governments schools. Academic calendar, teacher training programs, working hours of the school, local holidays and special holidays are mostly decided by the school and DEO for most of the private schools, whereas MEO, DEO and State Education Department and SSA are the main decision makers in the case of most of the Government schools.

During the last two academic years, the decisions taken by some other body has impacted the day-to-day running of the school, 29% of the government schools and 17% of the private schools made representation to the higher authorities for review. The representation was successful in most of the cases.

⁹ Snehabala cards are designed in such a way that the children can learn the activities on their own. The cards are in the form of milestones. Each milestone has a set of cards which are expected to attain the expected competencies. Students are expected to start with first card of each milestone and they are expected to complete all the cards in that lesson. Then the children are evaluated with the help of evaluation card. Remedial classes are taken for those lagging behind.

Profile of Mathematics Teacher

We presumed that Mathematics teachers play an important role in the performance of the students apart from headmaster. Hence we made an attempt to gather the background information on Mathematics teachers in addition to headmaster. On an average, the age of Mathematics teacher (here afterwards we denote as Teacher) in private schools is about 29 years as compared to 33 years in case of those employed in government schools. 69% of the Teachers are women in private schools compared to 35% in government schools. However, in the urban areas the percentage of women teachers in private and government schools are 82 and 65 respectively. That is about 80% of the teachers in the urban areas are women as compared to 36% in the rural areas. Teachers belonging to social categories like BC and OC account for more than 80% in the private schools both in the rural and urban areas whereas Teachers belonging to social groups like SC and ST account for about 30% in the government schools both in the rural and urban areas. About 29% of the Teachers in government schools in rural areas possess higher secondary or below qualification as compared to 21% in rural private schools. Similarly about 20% of the Teachers in government schools in urban areas possess higher secondary or below qualifications compared to 14% of the Teachers in urban private schools. 71% in rural area and 80% of teachers in urban areas in government schools possess qualification of Degree and higher. But teachers of private schools, irrespective of the location of the school, are slightly better placed in terms of academic qualifications, but teachers in government schools have better qualifications in terms of education specific training. About 34% of teachers working in rural private schools and 43% of teachers in urban private schools do not have any teacher training qualification as against 17% and 10% respectively in government schools. Around 50% of teachers in private schools, irrespective of location have B.Ed. qualification, while 53% of teachers in rural government schools and 70% in urban government schools possessed such qualification. Overall, teachers working in government schools are well qualified in terms of teacher training¹⁰(Table 3.5).

¹⁰ Wright (2012) tried to synthesize the literature on the extent to which teacher characteristics and compensation account for differences in the students' outcomes. These findings show that there do not seem to be a clear pattern regarding how most measurable teacher characteristics relate to student achievement. Education and experience are not reliably correlated with student's outcomes. Salary levels do not appear to affect student outcomes although performance pay does appear to positively impact incentivized test scores. In general, the present certification requirement may not guarantee entry of potentially good teacher into the profession. The author also state that there is evidence that alternative certification program such as TFA produce achievement gains relative to traditional certified teachers at schools in low-income communities.

Table 3.5: Qualification of Mathematics Teachers by Location and Type of the School

Location of school	Proportion of teachers with matriculation (Higher secondary) qualifications		Proportion of teachers with degree (Masters) qualifications	
	Government	Private	Government	Private
Rural	0.05 (0.24)	0.01 (0.20)	0.54 (0.17)	0.54 (0.25)
Urban	0.05 (0.15)	0.02 (0.12)	0.55 (0.25)	0.70 (0.16)

Note: Figures in parentheses relate to the text in parentheses in the table sub-heading.

Source: School based survey as a part of Young Lives study

87% of Teachers' mother tongue is Telugu and about 8% of the Teachers' mother tongue is Urdu. It is important to note that around 40% of the Teachers in private schools can write letters in English as compared to 20% in government schools. There is a view that the residing place of the teacher also influences the performance of students. Our data shows that about 47% of the Teachers from urban areas have the same native place as compared to about 28% of the Teachers in rural areas. It is worth noting that about 52% of the Teachers belonging to rural schools stay in other villages of the district. In the case of urban school Teachers we find that about 28% of them commute from the villages. However, number of days encountered by Teachers while traveling to school in a year is negligible. Average time taken per day to reach school from the place of residence is about 27 minutes for government school teachers and about 17 minutes for private school teachers. About 22% and 5% of the Teachers in the government and private schools respectively are designated as headmasters (Table 3.6).

Table 3.6: Proportion of Teachers Working as Headmasters and as Vidya Volunteers

Location of school	Proportion of teachers as HMs (regular teachers)		Proportion of teachers as Vidya volunteers (informal teachers)	
	Government	Private	Government	Private
Rural	0.20	0.09	0.33	0.01
Urban	0.25	0.03	0.30	0.03

Note: Figures in parentheses relate to the text in parentheses in the table sub-heading.

Source: School based survey as a part of Young Lives study

About 66% of the Teachers in government schools are in regular service compared to 25% in the private schools. More than half of the Teachers indicated that they specialized in a subject during their teacher training education (Table 3.7).

Table 3.7: Distribution of Regular, Temporary Teachers and Teachers Having Specialized Training

Location of school	Proportion of teachers as regular (temporary)		Proportion of teachers having specialized training in subject (Mathematics)	
	Government	Private	Government	Private
Rural	0.66 (0.34)	0.25 (0.75)	0.54 (0.32)	0.57 (0.64)
Urban	0.70 (0.30)	0.25 (0.75)	0.75 (0.07)	0.52 (0.75)

Note: Figures in parentheses relate to the text in parentheses in the table sub-heading.

Source: School based survey as a part of Young Lives study

The areas in which private school Teachers specialized during their teacher training were Mathematics (71%), EVS (12%) and Science (8%). Similarly, the areas in which government school Teachers specialized during their teacher training were EVS (45%), Mathematics (27%) and Science (17%). It is interesting to note that about 31% of the Teachers indicated that they had currently registered for higher studies. We may note that most of the teachers in the private schools are relatively younger compared to the teachers of government schools (Table 3.8).

Table 3.8: Teacher Service (in years) by Location of School

Location of school	Government schools		Private schools	
	Vidya Volunteer	Teacher	Vidya Volunteer	Teacher
Rural	1	7 (3.28)	1	5 (3.65)
Urban	1	10 (6.75)	0	5 (3.65)

Note: Figures in brackets indicate the number of years of service in the present school.

Source: School based survey as a part of Young Lives study

Almost all Teachers indicated that they studied English as a formal subject, and more than 80% studied English as a formal subject at Degree and above levels. Only about 26% of the Teachers studied in English medium before becoming Teachers. Their distribution in rural and urban areas according to government and private schools is given in Table 3.9.

Table 3.9: Proportion of Teachers studied in English medium

Location of school	Government	Private
Rural	0.11	0.20
Urban	0.15	0.54

Source: School based survey as a part of Young Lives study

22% and 13% of the Teachers in Government and private schools respectively have been trained to teach English to non-English medium students. About 81% of the

government Teachers attended in-service training program during the last academic year and another 17% attended in the previous two years. Among the government school Teachers who received training during the last academic year, about 87% of them received training on a regular basis and about half of them received training more than once in a year.

About 59% teachers of the government schools are members of Teachers' Association (TA) as compared to only 5% of the private school Teachers. However, about 34% Teachers of the government schools are active members of the TA. It is important to note that about 37% of the private school Teachers applied for a job in government schools. Perhaps security and higher salaries might have attracted them to apply for the government posts. Curiously only about 11% of the government school Teachers and about 20% of the private school Teachers have written contract / appointment letter with the school. None of the private school Teachers in SC/ST/OBC Colony has written contract / appointment letter with the school.

Salary and Incentives

Current monthly gross salaries for school Teachers indicate vast difference between private and government schools. On an average, salary of a teacher working in a private school is almost or less than one third of a government school teacher (Table 3.10). Similar wide disparities are noticed in other studies (Goyal and Pandey, 2012)¹¹. It may be noted that the average monthly salary of the private school Teachers belonging to SC/ST/OBC Colony is the least and it is about Rs 2986/-. In most of the cases salary is paid on time every month.

Table 3.10: Current Gross Salary per month (Rs.)

Location of school	Government	Private
Rural	11,989	4,517
Urban	14,188	3,631

Source: School based survey as a part of Young Lives study

It may be noted that the average monthly gross household income other than salary received by the private school Teachers of SC/ST/OBC Colony is the least amount of Rs 4643/-, and those working in urban areas are better placed in terms of other household income (Table 3.11).

¹¹ Their study reveals that Teacher salary in private schools is between one-seventh and one-eighth of the government schools though teacher effort is largely similar except for private unrecognized schools.

Table 3.11: Gross Household Income Per Month Other than Salary (Rs.)

Location of school	Government	Private
Rural	5,397	5,769
Urban	11,750	7,974

Source: School based survey as a part of Young Lives study

Rewards / incentives received for good performance during the last three years indicate that more number of teachers working in private schools got such benefits (Table 3.12). But, none of the private school Teachers of SC/ST/OBC Colony received rewards/ incentives for good performance. In some cases the rewards are in the form of transfer in the case of rural area school Teachers and additional increment in the case of urban area school Teachers.

Table 3.12: Percent of Teachers Receiving the Rewards in the Rural and Urban Areas

Location of school	Government	Private
Rural	7	6
Urban	0	11

Source: School based survey as a part of Young Lives study

Teaching Preparation

We find that about 31% of the private school Teachers and about 16% of the government school Teachers do not have a lesson plan for each session. However, about 56% of the Teachers prepare for each lesson and another 12% prepare for more than half the lessons.

Teacher's Capacity Index

Teacher capacity Index has been generated to tackle various challenges with the classes they teach and how manageable the situation would be. The challenges we considered include: students coming from wide range of backgrounds, students with special needs, students with learning difficulties, too many students in the class, few students in the class, children from different grades, disruptive children in the class, irregular attendance of children, students not concentrating and students from widely ranging ages in the class. We give equal importance for each of these student problems assign value (1) if a particular problem of students is manageable and (0) if it is otherwise. So the Teacher capacity index to tackle the student problems takes a maximum value of 10 if all the problems of students are manageable and 0 if none of the student problems are manageable.

On the average we find that about six of the above mentioned problems are manageable by teachers in the rural government schools compared to about 4 by the teachers in the urban government schools. Similarly, on the average we find that about 5.4 of the above mentioned problems are manageable by teachers in the rural private schools compared

to about 4.6 by the teachers in the urban private schools. Thus, we find that student problems in the rural schools are relatively manageable compared to student problems in the urban schools (Table 3.13).

Table 3.13: Teacher Capacity Index to Tackle Student Problems While Teaching

Location of school	Government	Private
Rural	5.97	5.40
Urban	3.84	4.60

Source: School based survey as a part of Young Lives study

We also tried to assess the teacher capacity to tackle the various external problems of students through Teacher Capacity Index. In this index we considered problems with parents of the students, community interference, community environment (eg. unsafe violent neighborhood etc.), and parents not being able to afford the required materials. The Teacher Capacity index to tackle the various external problems of students takes a maximum value of 4 if all the student problems are manageable. Here also we find that managing student problems is higher in the rural government schools when compared to student problems in the other schools (Table 3.14).

Table 3.14: Teacher Capacity Index to Manage Student External Problems

Location of school	Government	Private
Rural	2.52	1.17
Urban	0.68	0.72

Source: School based survey as a part of Young Lives study

Three important methods used by Teachers to motivate students are recognition of their performance (35% of teachers reported), providing more opportunities to participate in the Class (29% of teachers reported) and providing small incentives (17% of teachers reported). Regarding academically weaker students' problems, the important suggestions given by the teachers are talk to the child and invite parents to schools.

Private tuition is highly prevalent among students of urban private schools. Similarly, since 2009, the percentage of schools from which the students are taking private tuition has increased in rural private schools (47%) (Tables: 3.15 and 3.16).

Table 3.15: Schools Reporting that Students Going for Private Tuition

Location of school	Government	Private
Rural	24	23
Urban	26	42

Source: School based survey as a part of Young Lives study

Table 3.16: % of School Teachers Reported that Private tuition Increased Since 2009

Location of school	Government	Private
Rural	27	47
Urban	25	29

Source: School based survey as a part of Young Lives study

Teachers reported that male children from 80% of government schools and 97% of private schools receive private tuition. This finding in conjunction with the above finding, we may infer that private tuition is highly prevalent among boys when compared to girls ¹².

Teachers from 85% of the government schools indicated that they participated in teaching combined classes compared to 31% from private schools. Combining classes is a pre-planned and permanent arrangement (temporary due to the absence of other teachers) has been reported by Teachers from 29% (69%) of the government schools compared to 20% (78%) reported by Teachers from private schools. The important strategies adopted by the Teachers to cope with teaching in combined classes are 'separate children in the classroom into class-specific groups and divide teaching time between them' and 'identify common elements in the syllabus of different classes and teach these to all'.

Almost all the government schools follow SCERT syllabus, whereas private schools follow SCERT (75%) and other syllabuses (21%). Similarly, Teachers from about 49% of the Government schools are aware of National Curriculum Framework (NCF) 2005 compared to 12% Teachers from Private schools. Among the Teachers who are aware of the NCF 2005, those who received training of NCF 2005 were 43% from government schools as compared to 11% from private schools. It is also reported that Teachers from about 28% of the Government schools received training on Constructivism as against to 7% Teachers from Private schools. It all indicates that majority of teachers working in government schools are equipped with relevant inputs of quality teaching compared to private school teachers.

Timetable and time allocation

Prescribed timetable and allocation of classes indicate the regularity of teaching and discipline in the school which are important for achieving good performance. Almost all the Teachers indicated that the timetable is provided by HM/Principal and they strictly follow the timetable. However, the more the administrative work, the lesser will be the teaching time. Data shows that the average amount of time spent on administrative works on a normal school is about 26 minutes by government school Teachers and it is about 11 minutes by private school Teachers.

¹² ASER annual reports indicate a regular increase in the private tuitions over the years.

Index of work load and school records maintenance by Teachers

Maintenance of records by a teacher about their class students is a pre-requisite for any school. Records indicate that government school teachers are moderately better than that of the private school teachers in this aspect (Table 3.17).

Table 3.17: Index of Teachers' Maintenance of Records About Students

Location of school	Government		Private	
	School records	Teaching and student records	School records	Teaching and student records
Rural	0.86	0.93	0.78	0.80
Urban	0.82	0.86	0.80	0.82

Source: School based survey as a part of Young Lives study

We have also gathered information on the work load of teachers as part of their teaching activity and considered eight factors. They include: preparation of annual plan, unit plan, and lesson plan, preparation of teaching and learning materials, teacher diary notes, and preparation of remedial teaching material for slow learners, student progress cards and preparing projects for the children. The average of the responses for these factors has been tabulated in the form of an index of teachers' extra workload and is presented below. We find that index of extra workload is higher for government school teachers when compared to private school teachers (Table 3.18).

Table 3.18: Index of Extra Work Load of Teachers

Locality	Government	Private
Rural	0.93	0.80
Urban	0.86	0.82

Source: School based survey as a part of Young Lives study

Teaching and Learning Materials (TLM)

More than 85% of the Teachers from both Government and private schools use new methods of teaching regularly and about 13% of the Teachers use them occasionally. 89% of the Teachers from government schools use TLM regularly when compared to 73% Teachers from private schools. Further, about 2% of the Teachers from private schools use TLM occasionally as compared to 9% Teachers from government schools. More than 90% of the Teachers from both the government and private schools use the prescribed textbook as the main TLM. Almost all the Teachers stressed that the use of TLM is beneficial to the students. We may note that the TLM grant in the current academic year was received by about 57% of the government school Teachers compared to only 7% of the private school Teachers¹³. The amount of TLM grant received by a

¹³ It is to be noted that private aided school teachers also get some amount towards TLM though not on par with government teachers.

Teacher in rural government schools is Rs 602/- compared to Rs 571/- by a Teacher in rural private schools. In the case of urban school Teacher, the corresponding amount is Rs 500/-.

The TLM grant was received in time in the case of private school Teachers and it was received in time by about 82% of the government school Teachers. About 58% of the private school Teachers used TLM grant to prepare TLM material on their own compared to 41% of the government school Teachers. 48% of the government school Teachers purchased TLM material from the market compared to 25% by the private school Teachers. It is interesting to note that 17% of the private school Teachers engaged their students to prepare TLM material compared to 7% by the government school Teachers. TLM grant was insufficient for more than 75% of the teachers (Table 3.19). The government school Teachers indicated that an amount of Rs 1,274/- is required to prepare TLM material compared to Rs 1,875/- indicated by the private school Teachers for the same. Thus there is a need for enhancing the TLM grant.

Table 3.19 Proportion of Teachers Reporting TLM Grant is Sufficient

Location of school	Government	Private
Rural	0.33	0.29
Urban	0.23	0.33

Source: School based survey as a part of Young Lives study

Remedial cards for Mathematics are available in about 76% of the government schools as against 11% of the private schools. Remedial cards for Mathematics in Telugu are available in about 74% and 8% of the government and private schools respectively.

Role of Higher Authorities

Regarding students' attendance, students' achievements, evaluation of teaching, midday meal programme and Children's Learning Acceleration Programme (CLAP)/Learning Enhancement Programme (LEP), most of the Government schools report to higher authorities either monthly or quarterly. No such pattern of reporting to respective higher authorities is observed in the case of private schools. During the academic year 2009-10, we find that officials or functionaries visited 98% of the Government schools and 88% of private schools.

The average number of visits per school by State Monitoring Committee (SMC), Academic Monitoring Committee (AMC)¹⁴ and DEO during last academic year in the government schools is relatively higher compared to private schools in both the rural

¹⁴ AMCs are constituted in the government schools which meet in regular intervals to discuss the children progress etc; but some of the private schools are also following the similar procedure.

and urban areas. Whereas the average number of visits per school by Higher Internal School Management (HISM) in the case of private schools and School Complex Chairperson (SCC) in the case of government schools during last academic year is substantially higher in the private schools compared to government schools in both the rural and urban areas. School visits by SMC, AMC and DEO and also school visits by HISM and SCC during last academic year (2009-10) are given in Table 3.20.

Table 3.20: Different Functionaries Monitoring by School Visits

Nature of visits	Government		Private	
	Rural	Urban	Rural	Urban
Average number of visits per school by SMC, AMC and DEO during academic year 2009-10	6.56	5.21	1.25	0.65
Average number of visits per school by HISM and SCC during academic year 2009-10	3.51	3.74	17.64	12.45
Average number of visits per school by MEO and SI during academic year 2009-10	3.20	3.62	2.28	3.62
Average number of visits per school by DRP and MRP during academic year 2009-10	5.95	4.95	1.70	0.81

Source: School based survey as a part of Young Lives study

The number of visits per school by MEO and School Inspector (SI) during last academic year in the government schools is higher when compared to private schools in both the rural and urban areas. Whereas the average number of visits per school by DRP and MRP during last academic year is substantially higher in the government schools compared to private schools in both the rural and urban areas.

To sum up, during the last academic year, the highest number of official visits made per Government school are by academic monitoring committee (6.14), followed by MRP (5.32), MEO (2.73), school complex chairperson (2.55) and higher internal school management (1.0). SI is also made visits (0.55). In the case of private schools, the number of visits made by school complex chairman (10.57) followed by HISM (4.02), MEO (1.67), and MRPs (0.99). SI also made visits (0.39) to private schools. It is interesting to note that school complex chairman made on the average about 164 visits



to private schools in SC/ST/BC colony and 15.37 visits to other rural private schools. It is apt to examine whether the number of visits made by officials and non-officials and interaction with the community leaders and what they have discussed in their interactions is having any impact on the performance of students. This is given in detail in the next chapter.

Parent and community interactions and the role of Teachers

The main strategy used by the government school Teachers to convince parents who are reluctant to send their children to school was making repeated home visits and in case of private schools, Teachers were requesting parents to come to school and making repeated home visits. As said earlier, frequent visits of parents to school will enhance the quality of schooling and we considered six indicators of parents visits which include: visit the class and observe, attend parent-teacher meetings, discuss child's progress during pickup and drop off, seeking the teachers' advice on helping their child develop specific skills, act as resource persons in class and doing homework activities that require parental participation. The index of these indicators reveals that involvement of parents in their children's studies is moderate and it is the same irrespective of the type of school. In other words, the index of involvement of parents in their children's studies range between 0.39 and 0.46 irrespective of the location and type of the school. The important reasons for limited parental involvement in school related matters of the education of their children are related to parental work schedule and illiteracy of parents (Preet Rustagi (2013)¹⁵.

About 94% of the Teachers from government schools visit homes of the children to discuss their progress with parents compared to only 37% of the private school Teachers making such home visits. Most of the visits made by the government school Teachers were either weekly or monthly, whereas the visits of the private school Teachers were either monthly or quarterly. Most of the last home visits by the government school Teachers were either last week or last month, whereas the last visits of the private school Teachers were either last month or last quarter. 59% of the Teachers from government schools indicated that they personally secured support for the school from the community whereas only 42% of the private school Teachers secured such support from the community (Tejaswini and Sridevi (2012)¹⁶.



¹⁵ School monitoring committees; PTAs; VECs etc plays an important role in the quality of service delivery. She also advocate establishment of social audit committees in the education to improve the quality of service in education.

¹⁶ The study carried out with the aim to call attention to the issues that hinder the progress of students. Authors emphasized that these concerns can be identified and addressed by proper channels so that the parishad Primary schools students can emerge as competent Individuals on par with students from schools can run by Central Government and private sector. The paper expounds that the society also has a major role to play in the improvement of primary schools. The practical implications of education system on the students who study in Zilla and Mandal Parishad primary schools are unproductive. When these children go for higher education, the lack of self confidence and interpersonal skills will affect their performance due to their inadequacy in the English language skills. This could be the main cause for them to drop out of colleges

Aide memoire of sarva Siksha Abhiyan (2012) noted that Community ownership of schools which was envisaged to be the backbone for the successful implementation of the programme at the grassroots level has met with partial success as most village education committees took a ringside view of school activity.

Sum up

- Women form a considerable percentage of Principals and they are more in urban areas. More than half of the Principals in private schools hold a Master's Degree while the number is less in government schools. When it comes to trained Headmasters, the number is much higher in government schools.
- Social composition figures show that HMs are mostly BC or OC in private schools. HMs in urban areas are more experienced, irrespective of the type of school. Government school HM draws three times more salary than that of the private school HM.
- Majority private schools start teaching English from Class I in private schools while it begins from Class III in government schools. English medium is available in private schools only.
- Private schools also use government text books and they are available on time. Students' performance is displayed before parents by many schools and progress cards are sent to parents.
- Majority government schools have Snehabala cards unlike private schools. Repetition of class by a student is the joint decision in both types of schools.
- Women teachers are higher in number in urban areas and in private schools in rural areas. They hold Bachelor's Degree.
- Trained teachers are more in government schools irrespective of the region.
- More than one-third of the private school teachers have applied for government school jobs. Specialization in Mathematics is more in private schools.
- Government teacher gets nearly three times the salary of a teacher in private school.
- Lesson plan is not on the higher side in both types of schools.
- Training on Constructivism is higher in government schools.
- The extra load is higher on teachers working in government schools.

CHAPTER - IV

Performance of Class-V School Children : Some Interrelated Factors

School Achievement

School achievement was assessed based on the performance of the Class V students both subject wise and all the subjects put together. We have collected information on the average and highest scores in the class V examination conducted by the school itself. This information is copied from the registers maintained by the school.

The average scores of the Class V students of private schools in the final examination of Mathematics are significantly higher than that of the government school students in both the rural and urban areas (Table 4.1).

Table 4.1: Class V Students Performance in Different Subjects in Final Examination

Sl. No	Subject	Government		Private	
		Rural	Urban	Rural	Urban
1	Average score in Mathematics	61(12.2)	65(15.4)	76(13.5)	75(13.9)
2	Average highest score in Mathematics	81(12.8)	84(14.5)	93(8.9)	96(5.5)
3	Average score in Telugu	64(13.3)	70(13.7)	78(13.0)	73(14.1)
4	Average highest score in Telugu	83(12.8)	86(12.0)	94(8.7)	94(7.1)
5	Average score in English	58(13.5)	65(14.2)	76(12.1)	75(13.5)
6	Average highest score in English	76(15.1)	81(13.5)	91(10.0)	93(7.2)
7	Average score in EVS	63(13.6)	65(15.0)	78(12.8)	74(13.6)
8	Average highest score EVS	79(13.5)	84(15.3)	92(8.8)	94(7.2)

Notes:

1. The figures in the parentheses indicate standard deviations.
2. The data on performance of Class V students in the subjects mentioned above is available from 81 rural government schools, 44 rural private schools, 19 urban government schools and 83 urban private schools for all subjects other than Science.

Source: School based survey as a part of Young Lives study

Similarly, the average highest scores of the Class V students of private schools in the final examination of Mathematics are significantly higher than that of the government school students in both the rural and urban areas. We also find the average highest score of the Class V students of the urban private schools in the final examination of Mathematics is significantly higher than that of the rural private school students and no such difference is found between the students of urban government and rural government schools.

The average score of the Class V students of private schools in the final examination of Telugu is significantly higher than that of the government school students in both the rural and urban areas. Further, we find that the average score of the Class V students of urban government schools in the final examination of Telugu is significantly higher than that of the rural government school students whereas the average score of the Class V students of rural private schools in the final examination of Telugu is significantly higher than that of the urban government school students.

Similarly, the average highest scores of the Class V students of private schools in the final examination of Telugu is significantly higher than that of the government school students in both the rural and urban areas. We also find that the average highest score of the Class V students of the urban government schools in the final examination of Telugu is significantly higher than that of the rural government school students and no significant difference in the performance is found between the students of urban and rural private school students.

The average scores of the Class V students of private schools in the final examination of English is significantly higher than that of the government school students in rural and urban areas. Further, we find that the average score of the Class V students of urban government schools in the final examination of English is significantly higher than that of the rural government school students. No such significant difference is found in the average score of the Class V students of rural private and urban private schools in the final examination of English. Similar trend is observed in the average highest score. Overall, rural government students scored less marks when compared to urban students.

Average score and the average highest score of the Class V students in the final examination of EVS and Science subjects are significantly lower in government schools irrespective of the school location. Similar trend is observed even in the average highest score.

We note that the combined average score and the combined average highest score of the Class V students of private schools in the final examination of Mathematics, English, Telugu and EVS are significantly higher than that of the government school students in both the rural and urban areas. However, there is no significant difference in performance

between the rural and urban areas, both for government and private school students regarding average and the highest scores (Table 4.2). However, other studies also revealed the better performance of private schools but these results are not robust and the degree of variability is high (Goyal and Pandey, 2012 and others)¹⁷. In the present study, overall private school Class V performance is better than government schools. Further, urban school Class V performance is better than rural areas both in private and government schools. But, urban government schools are better performers than rural private schools. The location and type, both, matter. The grading of performance shows the urban-private schools on top followed by urban-government, rural-private and rural-government at the bottom. The results did not change even if we combine four subjects i.e. Mathematics, English, Telugu and EVS.

¹⁷ Their results indicate that although students in private schools perform better than students in government schools, the average score as well as the gain in learning from one grade to the next are low for both school types. It also indicates that the private school advantage in test scores is not robust. There is great degree of variability in test scores within and between schools in both the types of schools. Observable school and teacher characteristics are weakly correlated with test scores suggesting that rewarding teachers on the basis of their credentials may not be effective in raising effort. In UP, private unrecognized schools outperform private recognized schools in having a greater number of significant differences from government schools. In MP, there is no robust private school advantage. The study observed that private school teachers have higher attendance. Results also suggest that it is the market that is effective in determining quality - the better performance of unrecognized schools (as they strictly enforcing the learning standards) over private recognized and government schools is clearly evident. However, these results relate to 2006-07 and perhaps there may be some improvements due to various interventions.

PROBE report (1999) note that in a government school the chain of accountability is much weaker and it is strong in private schools. Parents also perceived this opinion. Many studies shows that comparing the performance of the two school types, the pvt school advantage remains even after controlling for a large set of observables (LEAPS 2007; Goyal 2006; Kremer and Muralidharan 2006; Tooley and Dixon 2006 and Kingdon 1996). A number of studies find that even after four and five years of schooling, children in government schools do not acquire the basic skills in literacy and numeracy (Pandey et al 2012; ASER 2007, 2006, 2005; POBE 1999).

Mukerji and Walton (2012) observed that there are sharply different views on what the problem is on the supply side, and thus the remedy should be. Some see this as an issue of inadequate 'inputs' - poor facilities, lack of training and so on. A different view sees the issue as a lack of incentives for teachers to put effort in to genuine teaching. Within this view, some argue that further expansion of private schooling is the answer, whether through use of vouchers or other means. Others advocate sharper incentives for government teachers. Yet another view is that the fundamental issue is one of a misaligned pedagogy. In rural AP, innovations that provide incentives for government teachers linked to learning bear fruit in better outcomes besides adding contract teachers also improved learning. But it is unclear which method is to be replicated for improving the learning. The study while quoting the ASER 2011 study showed that 40% of standard V students from AP cannot read a standard text of class II text and 62% of children in standard V cannot divide indicating the mismatch between curriculum and actual learning levels. NCERT studies in other states also showed similar trend. There have been very few experiments that carefully analyses effects of increasing inputs in an

Table 4.2: Combined average and highest scores of Class V students in the final examinations of Mathematics, English, Telugu and Environmental Studies

Location of the school	Combined average score of Class V students in final examinations of Mathematics, English and Telugu		Combined average highest score of Class V students in final examinations of Mathematics, English and Telugu	
	Government	Private	Government	Private
Rural	63	77	79	92
Urban	66	75	84	94

Source: School based survey as a part of Young Lives study

Indian context, children who attend school with better infrastructure seem not to do better in terms of quality. Citing the PROBE report (1999), the study stated that only in 53% of government schools any teaching activity has taken place across 4 states in India. Similarly Kremer et al study (2006) across 20 states, revealed that 25% teachers were absent from school on a given day. The study also state that systems can change both in government and private schools if everything is aligned, from top to bottom, to achieve goals that are carefully articulated and leadership is in place.

Henion and Chudgar (2012) analysed the reading, writing and math performance of 10000 Indian students aged 8 to 11 years and narrowed the sample to private and public school students with similar backgrounds found that private school students do not outperform their counterparts in public schools.

Geetha B Nambissan (2012) looks at some of the evidence that is available on low-cost schooling in India, and edu-business emerging around this sector in the light of the aspirations of low-income parents for private education for their children. The paper concludes that while the picture on low cost schooling is fragmentary, there appears to be little evidence or possibility of the promise of high quality education for a low fee from private players in this sector.

Murlidharan Karthik (2012) highlights that increasing the inputs to primary education are unlikely to change the trajectories of student learning in a meaningful way unless accompanied by significant changes in pedagogy and/or improvement in Governance. Also strongly supports scaling up supplemental instruction using locally hired short-tem teaching assistance that are targeted to the level of learning of the child which should be more easily implementable. The Government under the 12th plan to prioritize learning outcomes and provide states with pools of flexible funding that will allow them to experiment with ways of improving learning outcomes in a cost-effective way.

Aide Memoire (2012), Sarva Shiksha Abiyan, Sixteenth Joint Review Mission, summarizes that despite improvement in access and retention, the outcomes for majority of children continued to be an area of serious concern. Concerted efforts are required to ensure that a minimum set of cognitive skills are acquired by all children during eight years of elementary education. Poor quality of education reflects well known problems relating to the difficulty in recruiting qualified teachers and equally important, the difficulty in enforcing accountability among teachers once recruited.

Shruthi Joshi (2008) study found that due to lack of effective Government schools, parents prefer to enroll their children in private schools. There exist a large number of schools catering to this demand across various income categories. However, low income families are not able to fully support their children's education. This, along with high competition within the private sector, has led to low cost

It is interesting to note that the average performance of Class V students of private schools in SC/ST/BC colonies is significantly higher than that of the other private schools in all subjects except in Hindi and Science. However, the average highest scores of students belonging to private schools in SC/ST/BC colonies is significantly higher than that of the same in the other private schools in all the subjects¹⁸. We also examined the performance (combined average score in English, Telugu, Mathematics and EVS) of Class V students across school categories of government, private aided and private unaided across rural and urban areas. We find that the performance of rural private aided schools is significantly higher than that of the rural private un-aided schools and the performance of rural private un-aided schools is significantly higher than that of the rural government schools. In the case of urban schools too there is a similar grading of performance with 'aided' schools on top, followed by 'unaided' private schools and government schools landing at the bottom. The results are provided below (Table 4.3).

Arranging the schools in the increasing order of performance measured by the combined average score of Class V students in the final examinations of Mathematics, English, Telugu and EVS and dividing the schools into five equal groups namely quintiles (see annexure 1) we find the following:

- i. As expected, the average score increases with an increase in the quintile both for government and private schools.
- ii. The average scores of private school students in the 1st, and 2nd quintiles together and 3rd quintile are same as that of the government schools in the respective quintiles in both the rural and urban areas.
- iii. The average scores of private school students in the 4th and 5th quintiles together is significantly higher than that of the same of the government schools in the respective quintiles in rural and urban areas.

Similar results (i. and ii above) hold even if we classify the schools into quintiles using the average highest score of Class V students in the final examinations of Mathematics, English, Telugu and EVS.

operations by private budget schools. This means low initial investment, minimization of recurring costs while aiming to maximize students' enrolment and retention in order to ensure economic viability; and low surplus for investment in school development resulting sub-optimal learning achievements.

Galab et al. 2009; Socio-economic conditions, home environment are also acting as obstacles for achieving the required learning levels.

¹⁸ Appropriate t-statistic / z-statistic is used to obtain conclusions with regard to average performance and average highest scores of students

Table 4.3: Mean and Standard Deviation of Performance Scores Across Schools

Area	Government	Private-aided	Private un-aided	Total
Rural				
Mean	62.6 (81)	83.9 (6)	75.4 (38)	67.5 (125)
SD	12.2	7.9	12.4	13.9
Urban				
Mean	66.6 (19)	76.3 (9)	74.2 (74)	73.0 (102)
SD	13.8	13.9	12.3	13.0
All				
Mean	63.3 (100)	79.4 (15)	74.6 (112)	70.0 (227)
SD	12.6	12.1	12.3	13.7

Note: Figures in the parentheses indicate number of observations

Source: School based survey as a part of Young Lives study

Receiving an award is another indicator of quality schooling. Our data shows that about 18% of the government schools and 9% of the Private schools in the rural areas received awards from the State. The corresponding figures in the case of urban areas are 21% and 25% respectively. Out of the government schools that received awards about 19% of schools received the awards for the best performance of students. In the case of private schools, the corresponding figure is 40%.

About 66% of the private schools received 'A' grade at primary level during 2009-2010 compared to 6% in the Government schools¹⁹. About 97% of the private schools received either A or B grade during the 2009-2010 compared to 71% of the Government schools. 23% and 6% of the Government schools received the C and D grades respectively at primary level during 2009-2010. It is interesting to note that private schools in SC/ST/BC colonies received A and B grades, 50% each, at primary level during 2009-2010.

Examining the grades received at primary level during 2008-09 and 2009-10, we found that private schools in both the rural and urban areas have significantly improved their grades in 2009-10 as compared to 2008-09. We do not find significant improvements in the grades received by the rural government schools and in fact we found a significant decrease in the grades received by the urban government schools during 2009-10 over 2008-09. These conclusions are drawn based on Pair-wise t-test. For further details, see Annexure 2.

¹⁹ Grades like A, B, C are given based on the performance of the students in five different prescribed skills by the education department every year for government schools. The average of the skills of the students in the school is the criteria for giving grade to the school by the education department. However, private schools are also following the grading system and are showing the records to the officials of education department as and when required.

Based on pair-wise t-test, we find that only rural government schools received significantly higher star grade during 2009-10 compared to 2008-09. In all other cases, there are no changes in the star grade received during 2009-10 compared to 2008-09. Further details are placed in Annexure 2.

About 69% of the private schools gave awards in recognition to excellent performance from Class I to V during 2009-10 compared to 33% of the government schools. It is heartening to note that all the private schools in SC/ST/BC colonies gave awards to students in recognition to their excellent performance in Classes I to V (Table 4.4).

Table 4.4: Proportion of Schools Giving Awards to Learners Who Achieve Excellent Academic Results

Location of school	Proportion of schools giving awards / recognition to learners who achieve excellent academic results in classes I to V		Proportion of schools giving awards to learners who achieve excellent academic results in classes I to V	
	Government	Private	Government	Private
Rural	0.33	0.64	0.11 (6.00)	0.40 (15.72)
Urban	0.37	0.70	0.14 (6.71)	0.50 (17.69)

Note: Figures in the parentheses indicate the average number of students per school receiving awards for excellent performance.

Source: School based survey as a part of Young Lives study

On an average about 17 students per private school receive awards in recognition to their excellent performance in Classes I to V compared to about 6 students per government school.

Parent and Community Participation

Parents and community participation with the school headmaster and teachers is vital in improving the academic performance of the students as well as overall management of the school. Against this backdrop, we have collected information on different forms of such meetings.

Academic Monitoring Committee (AMC)

About 80% of the HMs of private schools do not meet community groups to discuss school matters whereas 87% of the HMs of government schools hold monthly meets to discuss school matters. The main issues discussed in the last meeting by government school HMs were performance and attendance of children. Attendance of children and mid-day meal issues were discussed in the second last meeting. Almost all government school HMs indicated that follow up actions were taken on the decisions at the meetings.

Parent Teacher Association (PTA)

About 70% of the government school used to have PTA meetings either monthly or quarterly compared to 55% of the private schools. 21% of the private schools have weekly PTA meetings. 24 % of the government schools do not have PTA meetings at all compared to 11% of the private schools. In the last, first and second PTA meetings, the main issues discussed were performance and attendance of the children. Mid-day meal scheme was also discussed in the second last meetings by about 22% of the government schools. More than 90% of the HMs indicated that the issues discussed in the PTA meetings are useful.

Panchayat Raj Institutions (PRI)

Government has realized that the problems in education cannot be solved through sponsored schemes and government efforts alone but it is necessary to involve community in educational planning. 73rd and 93rd amendments emphasize the sharing of education related responsibility among various levels of government. Thus Gram Panchayat at local level is responsible to address the issues of primary education in its area i.e. access as well quality of educational facilities. The direct involvement of PRIs is expected to make education system more accountable as they are in closer proximity with community. Against this backdrop, it is of interest to see the role of PRIs in primary education. The results indicate that about 90% of HMs indicated that the PRI meetings were not at all held.

Student Strength, Teacher Strength and Requirement

Given below is the data with regard to the strength of students and teachers and teacher adequacy:

- i. Almost all categories of schools were not able to fill up the sanctioned strength of teachers.
- ii. The gap between sanctioned strength and current teaching staff is relatively higher for private schools.
- iii. The average number of required teaching staff per school is uniformly higher than the average number of sanctioned teaching staff in all categories of schools.

To sum up, we may note that the shortage of teaching staff is relatively higher in private schools compared to government schools (Table 4.5).

Index of teacher shortage is defined as: $(\text{Number of sanctioned teachers} - \text{Number of existing teachers}) / \text{Number of existing teachers}$. It may be noted that the teacher shortage is the highest in rural government schools (47.77%), followed by urban private schools (47.72%), rural private schools (34.22%) and urban government schools (36.75%).

Table 4.5: Details of Average Number of Students, Teachers per School

Location of school	Government				Private			
	S	A	B	C	S	A	B	C
Rural	72	3	3.80	4.43	247	9	11.14	12.08
Urban	121	4	4.63	5.47	332	11	15.52	16.19

Notes: Figures in S indicate the average number of students per school

Figures in A indicate the average number of existing teaching staff per school

Figures in B indicate the average number of sanctioned teachers per school

Figures in C indicate the average number of required teachers per school

Source: School based survey as a part of Young Lives study

About 83% of the HMs of government schools maintains performance reports for themselves compared to 47% of the HMs of private schools. Similarly 85% of government schools maintain performance reports for teachers compared to 61% of the private schools. 89% of the HMs of government schools reported convening bi-monthly review meetings with teachers compared to 81% of the private school HMs. 93% of the HMs of government schools maintain Minutes Book as compared to 68% of the HMs of private schools.

Multi-grade teaching

The practice of grouping children from different sections is observed in about 8% and 17% of government and private schools respectively. The main reasons for combining classes in the case of government schools are insufficient space for teaching and shortage of teachers. In the case of private schools the main reasons are low enrollment in a section and not sufficient number of teachers.

Teacher absenteeism/punctuality

The teachers teach all the subjects in grades I to V in almost all the government schools and such practices are observed only in small percentage of private schools. During the 30 working days preceding the date of survey, 71% teacher absenteeism was reported in the schools. On an average any teacher has been absent in about 5.90 days during the period. When a teacher is on leave or absent, the most common strategy adopted by the HMs is to use a substitute teacher or the headmaster himself/herself taking the class. 25% of the HMs of government schools and about 37% of the HMs of private schools indicated that teachers in their schools sometimes are not punctual. The most important reason cited by teachers for their unpunctuality is either distance or family duties/chores²⁰.

²⁰ Narayan and Mooij argued that Teachers should get a larger role themselves in the formulation and implementation of a strategy to address teacher absenteeism.

Muralidharan (2012) find that on any given day, around 25% of teachers were absent from work, and less than half of the teachers on the payroll were found to be engaging in teaching activity. The

Teacher monitoring and management

The important ways of monitoring teacher's performance in government schools are having an individual meeting with the teachers to discuss their teaching, sudden inspection of teaching and students performance appraisal. Most (72%) of the HMs indicated that these methods of monitoring would have significant impact on the teacher's performance and another 24% of HMs also felt that these methods of monitoring teacher's performance would have some impact. Regarding teachers who are not performing well, "Issuing a warning" is the first course of action suggested by most of the HMs in private schools (92%) as well as in government schools (81%). In the case of government schools, where there is more hierarchy in authority, some HMs (11%) suggested that "complaint to higher official" as another course of action. In private schools, where there is certain flexibility by way of hiring and firing, 23% of HMs reported that they did dismiss non-performing teachers during their tenure. On an average in about 6% of the schools teachers were dismissed in private schools during the current period reported by the HMs. No such action is reported by HMs in government schools, where employment security is one of the important conditions of employment.

Principal/HM views and attitudes

We made an attempt to assess the job satisfaction levels of headmasters which ultimately impact on the quality of education in the school. We made an index of different aspects relating to job satisfaction which include salary, job security, position in the school, appreciation from parents, social status in the community, cooperation from PRI, facilities and resources in the school, appreciation from senior government officials and cooperation from teachers and other staff members.

absence rate was the second highest in a similar survey across 8 low and middle income countries. Muralidharan et al (2012) present results from a nationally-representative panel survey that revisited the villages visited in their early study, and find that there has been a reduction in teacher absence rates from 26.3% to 23.7%.

Diwan (2012) study provides evidence on caste dynamics impacting lives of the poor in the village where the upper caste dominates the lower caste, forcing them to wreathe in poverty and impelling them to go to small sized school located in the neighborhood. The inside stories of small schools depict realities, likely to have long-term implications on teacher absence and non-working days, teacher presence and no classes, dynamics between PTA and Head Teacher, management of schools, as well as commitment to the profession etc.

Narayan and Mooii in their study show that Teachers absenteeism in government primary schools in the rural India is huge and well documented phenomenon. Teachers should get a longer role themselves in the formulation and implementation of strategy in addressing teacher absenteeism. This study suggested that creation of local bodies that would hold the teachers accountability, the creation of a voucher system to allow parents to choose schools for their children, the recruitment of volunteers on the contract basis to do a teaching Job.

Index of Self Confidence

We also examined the self confidence of the headmasters in discharging their duties. These include: deriving satisfaction in discharging as HM, enthusiasm, adaptability to changes, positively accepting the changes made, feel full of energy and readiness, and accepting that there is competition from others. The average score of these variables from the data suggests that almost all the HMs have self confidence in discharging specified school related activities.

Important indicators of good school

The HMs of both government and private schools indicated that 'easy accessibility of schools geographically, good infrastructure, preparation and use of TLMs, good teacher qualification and good teacher attitude' are the important indicators of good schools. About 80% of the HMs indicated that their schools are better than other schools in the Mandal. Remaining 20% indicated that their schools are as good as other schools in the Mandal. In the case of government schools about 54% of the HMs of respective schools indicated that their schools are better than other schools in the Mandal and the remaining indicated that their schools are as good as other schools in the Mandal. With regard to the popularity of private schools, the most important reasons given by the HMs of both government and private schools are:

- i. English medium of instruction
- ii. School infrastructure and
- iii. More attention to students by the teachers.

Teacher appraisal index

An attempt is made to examine the teacher appraisal and its impact on the teachers. The appraisal indicators include: examining students' performance, checking the attendance and punctuality, examining the lesson plans, examining the interaction with students, examining the interaction with other staff, unscheduled inspection of teaching, having an individual meeting to discuss on teaching and looking at students' note books. We captured the information whether such appraisals have been undertaken, if so, by whom and generated an index of these responses. On the whole, teacher appraisal is slightly better in private schools as compared to government schools. Teacher performance appraisal by Principal is significantly higher in private schools compared to government schools. The performance appraisal by other teachers is insignificant. Teacher performance appraisal by external body is highly prevalent in the government schools (Tables 4.6, 4.7, and 4.8).

Teacher appraisal and feedback

Teacher evaluation may not have universal impact but it is expected to have some visible

effects on some. The results indicate that teacher evaluation has impact or change in about 43% and 55% of Teachers belonging to government and private schools respectively. However, teacher evaluation has not resulted in any downgrading of Teachers and also it has not resulted in diluting motivation to teach.

Table 4.6: Average Response of Appraisal Indicators

Location of school	Government	Private
Rural	0.43	0.48
Urban	0.43	0.50

Source: School based survey as a part of Young Lives study

Table 4.7: Teacher Performance Appraisal by Principal (Other teachers)

Location of school	Government	Private
Rural	0.49 (0.06)	0.81 (0.06)
Urban	0.48 (.01)	0.76 (0.06)

Source: School based survey as a part of Young Lives study

Table 4.8: Teacher Performance Appraisal by School Management Team (External body)

Location of school	Government	Private
Rural	0.0.10 (0.60)	0.13 (0.06)
Urban	0.01 (0.43)	0.20 (0.02)

Source: School based survey as a part of Young Lives study

Note: Figures in parentheses indicate respective text matter in the title of the table.

The immediate question arises whether such appraisals have any impact on the teachers? There are six different responses on the impact of appraisal which include: teaching has improved, given opportunities for professional development, received public recognition from the principal and colleagues, classroom management practices have been improved, subject knowledge has improved and understanding of instructional practices has improved. These responses have been analyzed and presented in the form of index below. Results indicate that around 50% of the teachers have responded that the appraisals have positive impact on them irrespective of the type of the school (Table 4.9).

Table 4.9: Average response of teachers on the appraisal (index)

Location of school	Government	Private
Rural	0.51	0.52
Urban	0.48	0.52

Source: School based survey as a part of Young Lives study

A regular meeting with parents and community leaders is an important method of improving the quality of schooling. Our data shows that about 88% of the Teachers indicated that PTA is useful to enhance the quality of schools and almost all of these Teachers have personally made use of PTA to enhance the quality of schools. 98% and 27% of the Teachers belonging to government schools and private schools respectively indicated that AMC is useful to enhance the quality of schools and almost all of them personally made use of AMC to enhance the quality of schools. Regarding PRI, the response from Teachers is lukewarm.

It is also true that frequent meetings between teachers pave the way for sharing the knowledge and also owning the system for improving the quality of education. More than 80% of the teachers indicated that the staff meetings were held regularly once in a month and teachers always attend these staff meetings. The first main topic that was discussed in the last staff meeting was academic issues and the subsequent topics were about school programs like mid-day meal in the case of government schools and discipline and student attendance in the case of private schools. Almost all the teachers actively cooperated / helped each other in school related matters. On the average more than 90% of the government school teachers extend cooperation in sharing of workload, admission tasks, when other teacher (s) are absent, preparation of TLM / lesson plan and sharing pedagogy and in the case of private schools, the corresponding figure is little over 75%.

Teacher attitudes

According to the primary school teachers, the three important goals of primary education are to develop good discipline and moral values among students (55%), development of students' creativity and critical thinking (36%) and developing the skills of students in reading, writing and mathematics (25%). According to the teachers of government schools, the three most important indicators of a good primary school are good school infrastructure, preparation and use of TLMs, and high parental engagement. In the case of private school teachers, the important indicators of good school are good school infrastructure and good teacher qualification. Both the teachers of government and private schools have indicated that their schools



are better than or as good as other schools in the mandal in terms of the indicators mentioned above.

Teachers' Satisfaction Index

Teacher job satisfaction has been captured through nine responses which include: salary, job security, position in the school, appreciation from parents, social status in the community, cooperation from PRI, facilities and resources in the school, support/appreciation from senior officials, support from other teachers/staff and career development opportunities. Teachers' satisfactory index is uniformly high across all the schools (Table 4.10).

Table 4.10: Teacher Job Satisfaction Index

Location of school	Government	Private
Rural	0.74	0.70
Urban	0.78	0.72

Source: School based survey as a part of Young Lives study

More than 50% of the Teachers indicated that their workload has increased during last three years and only about 3% indicated that the workload has not decreased. The main reasons for the increase in the workload indicated by the government school teachers are increase in non-teaching activities and lack of involvement of parents in their children's education. Whereas the private school teachers indicated that an increase in the number of students per class and lack of involvement of parents in their children's education as the main reasons for increase in the teachers' workload during last three years.

Index of Teachers' students' learning

An attempt was made to elicit the perceptions of the teachers on students' learning by making 18 statements and asked the teachers whether they will strongly agree or agree or be neutral, disagree or strongly disagree on each of the statement. The teachers' perception index on students' learning indicated that it is uniformly high and the same across all schools (Table 4.11).

Table 4.11: Teachers' Perception Index

Location of school	Government	Private
Rural	0.69	0.67
Urban	0.70	0.69

Source: School based survey as a part of Young Lives study



Sum up

- * A comparison of performance of Class V students in English, Mathematics, Telugu and EVS was studied in various types of schools.
- * Private schools performed better in the examination and in scoring marks. Rural aided schools also had put up a good show when compared to un-aided schools.
- * Private schools received higher grades and have improved over the previous year.
- * When it comes to star grades only rural government schools received higher grades for the year 2009-10 when compared to the previous year. There is no change in grades for other schools.
- * Giving awards to students for good performance is on the higher side in private schools than in government schools. The comparative figures being 17 students per private school getting awards as against 6 students per government school.
- * Vacancies are to be filled up in all categories of schools. The gap between requirement and existing strength is higher in private schools.
- * Easy accessibility, good atmosphere and teacher attitude are indicators of good schools while English medium is the focal point of attraction.
- * Teacher satisfaction is uniformly high across all categories while teacher evaluation has no impact on the system.
- * Workload has increased. In government schools, it is due to non-teaching activities and in private schools it is increase in the number of students per class. Lack of parents' involvement is the common factor in both types of schools.

CHAPTER - V

Determinants of the Performance of Class V Students

The performance of primary class students is normally judged by the marks which they obtain in the final examinations of Class V. We obtained information from 227 schools on average marks obtained by the Class V students in their final examinations in English, Telugu, Mathematics, EVS, Science and Hindi. Hindi is not taught in the primary schools in urban areas. Similarly, Science subject is also not taught in all the schools at the primary level. In view of these restrictions, we have considered the average of marks obtained by the class V students in their final examinations in English, Mathematics, Telugu and EVS. We have obtained this information from each of the 227 schools and this we term it as study variable or dependent variable.

The performance of the students will depend on the type of school, government or private, and also the location of the school, rural or urban. While studying the variations in the performance of students, we control for type of school and location of school. We introduce the following dummy variables:

D1: it takes value 1 if it is a government school in the rural areas and 0 otherwise.

D2: it takes value 1 if it is a private school in the rural areas and 0 otherwise

D3: it takes value 1 if it is a government school in the urban areas and 0 otherwise

Urban private schools are considered as a reference category.

Headmasters play an important role in the students' performance. We expect headmaster's qualification, total service, job satisfaction and social category to have a positive impact on students' performance. Human resources such as number of teachers (apart from their qualifications) will be one of the important variables that are used in predicting the student performance. We have used teacher-student ratio i.e. number of students/ number of teachers. This ratio is expected to have negative impact on the student performance. Further, teacher shortage will have negative impact on the student performance. We used the variable Index of teacher shortage measured by $(\text{Required number of teachers} - \text{number of current teachers}) / \text{Current number of teachers}$. This

ratio is expected to have negative relationship with the student performance. Number of class rooms used for teaching will also have an impact on the student performance. We used the ratio (number of students / number of teaching rooms) to examine the student performance. This ratio is also expected to have negative impact on the student performance. Due to lack of rooms for teaching, some schools use verandah or open space or both for teaching. We used the dummy variable D to capture this information. D takes value 1 if a school uses verandah or open space or both for teaching and 0 otherwise. Monitoring of the schools by higher officials will have positive impact on the student performance. We have considered separately the total number of visits by all officials during last year and also the number of visits made by High Internal School Management officials and School Complex Chairperson to examine the student performance. Number of working computers in the school is expected to have positive impact on the student performance. Similarly academic infrastructure measured in terms of annual expenditure on equipment, computers, textbooks and school material is expected to have positive impact on the student performance. Also infrastructure development measured in terms of expenditure during last three years on construction of new buildings, renovation of buildings, sanitation facilities and drinking water facilities is expected to have positive impact on the student performance. The government issues grades A, B, C or D (in the descending order of importance) satisfying certain requirements. We expect previous year's school grade to have positive impact on the student performance. School gives awards to the students for their best performance. We use dummy variable to indicate 1 if a school gives awards to students for their best performance in Classes I to V and 0 otherwise. The coefficient of this dummy variable is expected to have positive impact on the student performance. The above independent variables are used to study the student performance. It may be mentioned that school is taken as a unit for our analysis.

The full model and step-wise regression analysis are performed separately for all schools, rural schools and urban schools. The same exercise is repeated for schools for which school grades for 2008-09 are available. Also, the full model and step-wise regression analysis are performed separately for rural government schools, rural private schools, urban government schools and urban private schools. The same exercise is repeated for schools for which school grades for 2008-09 are available. The regression outputs are given in the annexure 3. We summarize below the important variables which are significant in explaining the student performance separately for all schools, government schools only, private schools only and schools by location (rural or urban) and category (government or private) along with usual goodness of fit measures. We also provide the same separately for rural government schools, urban government schools, rural private schools and urban private schools.

Dependent variable y= average marks (English, Mathematics, Telugu and EVS)
Sign (significance level) of regression coefficients

Variable	All schools	Govt. schools	Pvt. Schools
Constant	+ve (0.0)	+ve (0.005)	+ve (0.008)
D1	-ve (0.0)	Ns	-
D2	Ns	-	ns
D3 Ns	-	-	
X1: Headmaster service	Ns	Ns	ns
X2: Headmaster qualification	+ve (0.076)	Ns	+ve (0.015)
X4: No. of school visits	+ve (0.035)	Ns	+ve (0.019)
X5: Teacher student ratio	Ns	Ns	-ve (0.10)
X6: Teaching room student ratio	-ve (0.033)	Ns	-ve (0.042)
X7: D denotes for using Verandah / open space for teaching	Ns	Ns	ns
X8: Index of teacher shortage	Ns	Ns	ns
X10: No. of working computers	+ve (0.06)	+ve (0.011)	
X11: Academic infrastructure	+ve (0.05)	+ve (0.08)	+ve (0.04)
X12: Infrastructure development	Ns	Ns	ns
f: Headmaster's job satisfaction index	+ve (0.01)	+ve (0.07)	+ve (0.09)
X17: 1 If school gives awards, 0 otherwise	Ns	+ve (0.06)	ns
Number of observations	227	100	127
R square	0.273	0.138	0.133

Source: School based survey as a part of Young Lives study

We summarize below the important findings from the above regression outputs:

All Schools

In all schools, we find that Headmaster's educational qualification, Headmaster's Job satisfaction, number of school visits by High Internal School Management and School Complex Chairperson, teaching room student ratio, number of working computers per school and annual expenditure on academic infra-structure have significant impact on school performance of Class V students. Also, the performance of rural government schools is significantly lower than that of the urban private schools.

Government Schools

In government schools, we find that number of working computers per school, annual expenditure on academic infra-structure and schools giving awards to students for their best performance have significant impact on school performance of class V students.

Dependent variable y= average marks (English, Mathematics, Telugu and EVS)
Sign (significance level) of regression coefficients

Variable	RG	RP	UG	UP
X1: Headmaster service	Ns	ns	ns	ns
X2: Headmaster qualification	+ve (0.03)	ns	ns	+ve(0.01)
X4: No. of school visits	Ns	+ve (0.06)	ns	ns
X5: Teacher student ratio	Ns	Ns	ns	ns
X6: Teaching room student ratio	Ns	-ve (0.08)	ns	-ve (0.1)
X7: D denotes for using Verandah / open space for teaching	Ns	Ns	ns	ns
X8: Index of teacher shortage	Ns	ns	-ve (0.0)	ns
X10: Number of working computers	Ns	ns	+ve (0.0)	ns
X11: Academic infrastructure	+ve (0.05)	ns		ns
X12: Infrastructure development	+ve (0.07)		ns	ns
f : Headmaster's job satisfaction index	+ve (0.1)	+ve (0.03)	ns	ns
X17: 1 If school gives awards, 0 otherwise	+ve (0.05)	-ve (0.02)	ns	ns
Number of observations	81	44	19	83
R square	0.207	0.406	0.285	0.206

Note: Step-wise regressions results for Rural Private (RP) and Urban Government (UG) schools are used since the full model regressions indicate multi-collinearity. We used the results of full model regression in the cases of Rural Government (RG) and Urban Private (UP) schools

Source: School based survey as a part of Young Lives study

Rural government schools

In rural government schools, we find that Headmaster's educational qualifications, Headmaster's job satisfaction, annual expenditure on academic infra-structure, expenditure during last three years on infra-structure development and schools giving awards to students for their best performance have significant impact on school performance of Class V students.

Urban government schools

In urban government schools, we find that the teacher shortage and number of computers per school have significant impact on the school performance of Class V students.

Private schools

In private schools, we find that Headmaster's educational qualification, Headmaster's job satisfaction, number of school visits by High Internal School Management (HISM) and School Complex Chairperson (SCC), teaching room student ratio, teacher student ratio and annual expenditure on academic infra-structure have significant impact on school performance of Class V students.

Dependent variable y = average marks (English, Mathematics, Telugu and EVS) for schools where grades are available Sign (significance level) of regression coefficients

Variable	All schools	Govt. schools	Pvt. Schools
Constant	+ve (0.001)	+ve (0.02)	+ve (0.08)
D1	Ns	Ns	ns
D2	Ns	Ns	ns
D3	Ns	Ns	ns
X1: Headmaster service	Ns	Ns	ns
X2: Headmaster qualification	+ve (0.08)	+ve (0.02)	Ns
X4: No. of school visits	+ve (0.0)	Ns	+ve (0.0)
X5: Teacher student ratio	Ns	Ns	Ns
X6: Teaching room student ratio	Ns	Ns	Ns
X7: D denotes for using Verandah / open space for teaching	Ns	Ns	Ns
X8: Index of teacher shortage	Ns	Ns	Ns
X9: School Grade	+ve (0%)		+ve (0.0)
X10: No. of working computers		+ve (0.01)	
X11: Academic infrastructure	+ve (0.04)	+ve (0.2)	+ve (0.04)
X12: Infrastructure development	Ns	Ns	ns
f: Headmaster's job satisfaction index	+ve (0.04)	+ve (0.02)	Ns
X17: 1 If school gives awards, 0 otherwise	Ns	Ns	ns
Number of observations	185	99	86
R square	0.238	0.168	0.2224

Source: School based survey as a part of Young Lives study

Rural private schools

In rural private schools, we find that Headmaster's job satisfaction, number of school visits by HISM and SCC, teaching room student ratio and schools giving awards to students for their best performance have significant impact on school performance of Class V students.

Urban private schools

In urban private schools, we find that Headmaster's educational qualification and teaching room student ratio have significant impact on school performance of Class V students.

All schools (with grades)

In all types of schools (with grades), we find that Headmaster's educational qualification, Headmaster's job satisfaction, number of school visits by HISM and SCC, the school

Dependent variable y = average marks (English, Mathematics, Telugu and EVS) for schools where grades are available Sign (significance level) of regression coefficients

Variable	RG	RP	UG	UP
X1: Headmaster service	ns	ns	Ns	ns
X2: Headmaster qualification	+ve(0.025)	ns	Ns	Ns
X4: No. of school visits	ns	+ve(0.0)	+ve(0.0)	+ve(0.0)
X5: Teacher student ratio	ns	ns	Ns	Ns
X6: Teaching room student ratio	ns	ns	Ns	Ns
X7: D denotes for using Verandah / open space for teaching	ns	ns	-ve (0.06)	-ve (0.03)
X8: Index of teacher shortage	ns	ns	-ve(0.0)	ns
X9: school grade	ns	+ve(0.03)	+ve(0.02)	+ve(0.01)
X10: Number of working computers	+ve (0.1)	ns	+ve(0.0)	ns
X11: Academic infrastructure	+ve (0.04)	ns	Ns	+ve (0.06)
X12: Infrastructure development	-ve (0.06)	ns	-ve(0.05)	ns
f: Headmaster's job satisfaction index	+ve(0.1)	+ve(0.06)	Ns	ns
X17: 1 If school gives awards, 0 otherwise	+ve(0.03)	+ve(0.1)	Ns	+ve(0.06)
Number of observations	80	30	30	56
R square	0.207	0.410	0.410	0.324

Note: Step-wise regressions results for Rural Private (RP) and Urban Government (UG) schools are used since full model regressions indicated multi-collinearity. We used the results of full model regression in the cases of Rural Government (RG) and Urban Private (UP) schools

Source: School based survey as a part of Young Lives study

grade given in the previous year and annual expenditure on academic infra-structure have significant impact on school performance of class V students.

Government schools (with grades)

In government schools (with grades), we find that Headmaster's educational qualifications, Headmaster's job satisfaction, number of computers per school and annual expenditure on academic infra-structure have significant impact on school performance of Class V students.

Rural government schools (with grades)

In rural government schools (with grades), we find that Headmaster's educational qualifications, Headmaster's job satisfaction, the number of computers per school, annual expenditure on academic infra-structure, expenditure during last three years on infra-structure development and schools giving awards to students for best performance have significant impact on the school performance of Class V students.

Urban government schools (with grades)

In urban government schools (with grades), we find that the number of school visits by HISM and SCC, the school grade given in the previous year, teacher shortage and number of computers per school have significant impact on the school performance of Class V students.

Private schools (with grades)

In private schools (with grades), we find that number of school visits by HISM and SCC, the school grade received in the previous year and annual expenditure on academic infra-structure have significant impact on school performance of Class V students.

Rural private schools (with grades)

In rural private schools (with grades), we find that Headmaster's job satisfaction, number of school visits by HISM and SCC, the school grade received in the previous year and schools giving awards to students for their best performance have significant impact on school performance of Class V students.

Urban private schools (with grades)

In urban private schools (with grades), we find that the number of school visits by HISM and SCC, the schools using verandah or open space for teaching, the school grade received in the previous year, annual expenditure on academic infra-structure and schools giving awards to students for their best performance have significant impact on the school performance of Class V students.

Private aided and un-aided schools in the rural areas

We have already noted in the previous chapter that the performance of Class V students in the private aided schools is significantly higher than the performance of Class V students in the rural government schools. We will examine here whether this is true even after allowing the impact of all possible independent variables which affect the student performance in Class V. We use the following dummy variables to capture the effect of private aided schools in the rural areas:

$d_{11} = 1$ if it is a rural private aided school and 0 other-wise.

$d_{12} = 1$ if it is a rural private un-aided school and 0 other wise.

The reference category is rural government schools.

We regress the performance score y on d_{11} , d_{12} and the independent variables x_1 , x_2, \dots, x_{17} and f . If the coefficient of d_{11} is positive and significant implies that the performance of the students of private aided schools is significantly higher than the performance of the students of rural government schools. Similarly if the coefficient of d_{12} is positive and significant implies that the performance of rural private unaided schools is significantly higher than the performance of rural government schools.

This exercise is repeated for all rural schools with grades as well. The regression outputs and selected descriptive statistics are provided in annexures 4 and 4.1 respectively. We summarize the regression outputs by providing signs and significance levels of the regression coefficients together with the selected goodness of fit measures.

The important findings are

- i. The performances of rural private aided schools and rural private un-aided schools are significantly higher than that of the performance of rural government schools even after allowing the impact of selected independent variables.
- ii. The performance of rural private aided schools is significantly higher than that of the rural private un-aided schools even after allowing the impact of selected independent variables.

All rural schools and rural private schools

Dependent variable y = average marks (English, Maths, Telugu and SS) Sign
(significance level) of regression coefficients

Variable	All rural schools	Rural Private schools
Constant	+ve (0.0)	+ve(0.0)
d11	+ve (0.0)	+ve (0.08)
d12	+ve(0.02)	-
X1: Headmaster service	ns	ns
X2: Headmaster qualification	ns	ns
X4: No. of school visits	+ve(0.04)	+ve (0.1)
X5: Teacher student ratio	ns	ns
X6: Teaching room student ratio	ns	ns
X7: D denotes for using Verandah / open space for teaching	ns	ns
X8: Index of teacher shortage	ns	ns
X10: Number of working computers	ns	ns
X11: Academic infrastructure	ns	ns
X12: Infrastructure development	ns	ns
f: Headmaster's job satisfaction index	ns	ns
X17: 1 If school gives awards, 0 otherwise	ns	ns
Number of observations	125	44
R square	0.34	0.40

Source: School based survey as a part of Young Lives study

All rural schools and rural private schools with grades
Dependent variable y= average marks
(English, Mathematics, Telugu and EVS) Sign (significance level) of regression coefficients

Variable	All rural schools	Rural Private schools
Constant	+ve (0.015)	+ve (0.01)
d11	+ve (0.03)	+ve (0.01)
d12	ns	-
X1: Headmaster service	ns	+ve (0.06)
X2: Headmaster qualification	+ve(0.07)	Ns
X4: No. of school visits	+ve (0.02)	+ve(0.04)
X5: Teacher student ratio	ns	+ve (0.08)
X6: Teaching room student ratio	ns	ns
X7: D denotes for using Verandah / open space for teaching	ns	ns
X8: Index of teacher shortage	ns	ns
X9 : School grade	ns	ns
X10: Number of working computers	ns	ns
X11: Academic infrastructure	ns	+ve(0.06)
X12: Infrastructure development	-ve (0.1)	-ve (0.1)
f: Headmaster's job satisfaction index	ns	+ve (0.07)
X17: 1 If school gives awards, 0 otherwise	ns	
Number of observations	100	30
R square	0.330	0.695

Source: School based survey as a part of Young Lives study

Performance of backward and advanced districts

It may be noted that schools under our study belong to Ananthapur, Mahaboobnagar, Srikakulam, Kadapa, Karimnagar and West Godavari districts. Taking into account the economic and human development indicators, Ananthapur, Mahaboobnagar and Srikakulam are classified as backward districts and the other three districts as advanced districts. We will examine here whether the performance of Class V students has any relationship with the backwardness of the district. To examine this, we introduced the following dummy variables in our regression analysis:

d21= 1 if a private school belongs to advanced district and 0 otherwise

d22 = 1 if a government school belong to advanced district and 0 otherwise

d23 = 1 if a private school belongs to backward district.

The reference category is government schools belonging to backward districts.

We regress the performance score y on $d21$, $d22$, $d23$ and the independent variables $x1$, $x2, \dots, x17$ and f . If the coefficient of $d21$ is positive and significant implies that the performance of the students of private schools in the non-poor districts is significantly higher than the performance of the students of private schools belonging to poor districts. Similarly if the coefficient of $d22$ is positive and significant implies that the performance of students belonging to government schools of advanced districts is significantly higher than the performance of the students of government schools belonging to backward districts. Similarly, if the coefficient of $d23$ is positive and significant implies that the performance of students belonging to private schools of backward districts is significantly higher than the performance of the students of government schools belonging to backward districts. This exercise is repeated for all schools with grades as well. The regression outputs are provided in annexure 5. We summarize below the important findings of this regression analysis.

The important findings are

- i. The performances of the students of private schools belonging to both advanced and backward districts are significantly higher than that of the students of government schools in backward districts.
- ii. The performances of the students of government schools in the advanced districts and backward districts are the same.
- iii. Similarly, the performances of the students of private schools in the advanced districts and backward districts are the same.

These findings suggest that the performance of the students is dependent on the type of school but not whether it is in the advanced or backward districts.

Quintile Analysis

Using the school-wise average of average scores in Mathematics, English, Telugu and EVS, we have arranged schools in the increasing order of performance and divided schools into five equal groups called quintiles. It is interesting to note that even though the average mean score of the government schools is significantly smaller than the average mean score of the private schools, the average mean scores between government and private schools are the same in all the quintiles except the top two quintiles.

Probit analysis is used to identify variables which discriminate between the bottom two quintiles and the top two quintiles. This analysis is performed for Government schools and private schools which are having school grades. The regression outputs are provided

in Annexure 6. Annexure 6.1²¹ contains selected descriptive statistics of bottom two and top two quintiles together with the test statistics testing for the equality of means and variances of selected variables of these specified quintiles. The important findings are summarized below:

Government Schools

The discriminating variables between the performance of bottom two quintiles and the top two quintiles for the government schools are Headmaster's educational qualifications and Headmaster's job satisfaction, Number of working computers per school, annual expenditure on academic infrastructure, expenditure on infrastructure development (expenditure during last three years on construction of new buildings, renovation of buildings, sanitation facilities and drinking water facilities) and school giving awards to the students for their best performance in Classes I to V.

Private Schools

In the case of private schools, the discriminating variables between the performance of bottom two quintiles and the top two quintiles are number of school visits by HISM and SCC, school grade received in the previous year and annual expenditure on academic infra-structure.

Sum up

- To assess the performance of Class V children, full model and step-wise regression analysis are performed.
- The results indicated that Headmaster's educational qualification, his job satisfaction, number of school visits by High Internal School Management (HISM) and School Complex Chairperson (SCC) teaching room student ratio, number of computers available and annual expenditure on infrastructure are the factors that have significant impact on Class V students.
- Performance of rural government schools is significantly lower than that of the urban private schools.
- Computers and expenditure on infrastructure counts most in government schools for Class V students. In rural government schools, besides the indicators cited in second paragraph, giving awards to meritorious students also adds to the performance of the students.
- Teacher shortage and number of computers measure the performance in urban government school whereas the parameters mentioned in paragraph two stand fit in case of private schools, rural or urban.

²¹ Due to paucity of space, we have not attached the annexures but available with authors. Interested readers may please contact authors for the annexures.

CHAPTER - VI

Perceptions of Education Officers on Primary Education

In discussing the achievement of universal access to education, annual Global Monitoring Reports (GMRs) have highlighted the inadequacies of focusing on enrollment rates alone, without considering issues of governance, resource and quality. Young Lives through school-based component tried to capture not only which children have access to schooling, but also which children have access to quality schooling. In addition, views of the key officials of the Education Department at district and below district level (who all play vital role) on access to quality schooling, governance issues policy and programmes have been captured. These officers implement the policies of the government and their views on the entire gamut of education provide inputs to enrich the policies for improvement of education system. The key question for policy is whether education systems combat the differences in the access to quality schooling effectively or amplify them through the inequitable distribution of school quality. In all, this report reflects the views of 33 Education Officers (EOs). The officers include: District Education Officers (DEOs) of the sample districts, Project Officers of Rajeev Vidya Mission (formerly SSA) in the sample districts, and Mandal Education Officers (MEOs) of the selected sentinel sites. These are in addition to the information collected on the selected schools, views of the Principals/Head Masters of the respective schools, Mathematics teachers, classroom observations, and tests conducted for the children.

The perceptions of these officers are discussed under five subjects - i) education in the community: provision and perceptions ii) roles and responsibilities iii) quality of schooling iv) private and public school choice and v) policy programmes. These themes closely resemble with the topics dealt in the different field instruments of the school-based component. But the views of these officers go a long way in the policy recommendations on the education system in the state in general.

Education in the Community: Provision and Perceptions

All the officers interviewed are of the view that the people in their communities are giving importance to education. Nearly two-thirds of the officers opined that people in the respective communities are also of the view that their children can lead a better life

if they are educated. This is true across all the regions. For instance, one of the officers observed *"The people are showing interest to educate their wards irrespective of caste, community and economic conditions"*. Nearly one-third of the respondents observed that dropouts/ non-enrolment were noticed among scheduled tribes, migrant households, head of the households addicted to alcohol, and 'golla' community within the backward caste households. It is also heartening to note that nearly seventy per cent of the officers have clearly stated that there is no gender discrimination in educating the children. But the concern is that 30 per cent of the officers have noticed gender discrimination. Among cultural factors impacting children's access to conventional formal schooling, nearly one-third of the interviewees mentioned that children from tribal communities, children living in the hill areas, and children of migrant households are facing problems in access to education. These categories are not only facing lack of schools in the vicinity but also lack of teachers in the schools meant for these communities. It is pertinent to mention the observation of one of the DEOs who said *"... mainly the teachers of Primary School are absent to their work. This is due to insufficient monitoring of Primary Schools. The teachers are irregular because the Primary Schools are located in remote areas and some Primary Schools are far away from tribal areas where transportation is very less. -- we should increase the monitoring of these schools. In addition, appropriate punishments are to be given to teachers who are irregular to the school. Only then, they work with a total dedication. If a teacher teaches good things and provides valuable information to the students, then the school gets good recognition"*. Low education levels of parents and their attitudes to schooling, families depending on migration for a livelihood, financial difficulties, caring of a sibling, single member families, and having own land cultivation are the major reasons for not educating their children up to 8th Class, according to 67 per cent of the interviewees. In the case of girl children, one common observation is *"Girl children above 12 years of age could not continue their studies because they are attaining puberty. So their parents are not willing to send them to neighbouring villages and very soon they get married. Hence they can't continue their studies"*. In general terms, many cited parental attitudes as a barrier to enrollment or consistent attendance. The government programmes such as: badibata, door to door survey, snehabala, samsiddhata cards, and special drive programmes have enormous impact on the enrollment rates and in achievement levels of children. All the officers interviewed concurred with this view. About 91 per cent of the respondents also observed that mid-day meal scheme, free supply of school uniforms, introduction of **success school**²², provision for free text books, and fortnightly review functions have accelerated the enrolment rates. One of the interviewees observed that

²² Government of Andhra Pradesh introduced English medium sections in the identified high schools to enable the students from rural poor families and urban poor to access English medium of instruction.

"Worksite School" has been established to the children of working class. These innovative schools have been yielding desirable results particularly for the children of labourers". Another respondent commented, *"Majority of people living here are from below the poverty line and these people migrate to west and east Godavari districts to earn a livelihood. For these people we arranged RBC (residential bridge courses) and with this, the number of dropouts has decreased drastically".* A few (9%) are of the opinion that medium of instruction and lack of teachers is the major reasons for fall in the enrolment in government schools.

Roles and Responsibilities of the Education Officers (EOs)

About 82 per cent of the officers interviewed concurred with the view that they do not have sufficient support staff to discharge their duties regularly including the inspection of the schools. As per the prescribed rules every officer should visit 15 to 20 schools in a month and 85 per cent have agreed that they are not able to discharge their duties. Almost all of them argued the necessity of regular Deputy Education Officers (DEOs) and Mandal Education Officers (MEOs) as it is becoming very difficult to look after both administrative and monitoring works in addition to the regular duties of head master and teaching in the school. One of the officers interviewed opined that *"MEOs should not do administrative works. They should only monitor schools and test the students performance and they should report about the teachers who are irregular and they should conduct necessary meetings to create awareness among the people. Mandal Resource Persons (MRPs) who assist MEOs are also teachers and they cannot control them, instead they can act as epitome of success".* One of the district level officers commented that *"usually in a month we need to monitor for 15 days but we are not able to do that because of heavy load of work in the office. So we need an exclusive officer for monitoring. At present we are striving hard to enhance the quality of education but we should rely on higher officials before taking even small decisions".* All the officers have agreed that they have more responsibility in improving the quality of education in their jurisdiction. Regular monitoring, surprise visits, counseling of parents, teachers meeting with the community leaders will enhance the quality of education. In the quality aspect, one of the respondent in tribal areas observed that *"in this place, there are few qualified teachers (minimum of Bachelor of Education) and very large proportion are with 10th class education and many of such teachers are not even aware of the importance of education. He observed that qualified teachers alone shall be recruited".* One of the MEOs commented that *"students have been segregated based on the performance like: a, b, c etc., and the students with low performance have been given more attention in teaching with the help of snehabala cards to improve the quality of education which has achieved the results".* Another officer in the drought-prone region observed that *"by giving special attention to the low performing students in teaching attracted 12 students in private schools (with English as a medium of instruction) have*

joined in the government school". One of the DEOs opined that "We can improve quality only with the commitment of the teachers and also with the positive involvement of the community. I discharge my duties with the prior permission and orders of my higher officials. Some of my duties are recruitment of Vidya Volunteers, conducting of remedial and extra classes, maintaining of computer education and spoken English classes". Assistant Monitoring Officer (AMO) in the office of the Project Officer in the district under Rajiv Vidya Mission (SSA) is another key person who is identifying the teachers for training to improve the quality of education. Some of the Project Officers have acknowledged the role of AMOs in the improvement of quality of education and also advocated that the RVMs at district level should be given powers to take administrative action on the teachers which will pave the way in enhancing the quality. Another district officer is of the view that "Majority MEOs are in-charge MEOs and under each MEO there are about 150 head masters and schools because of this, MEOs are unable to do their work properly. Therefore, to solve this problem we should allocate only 30 schools for each MEO to improve quality". It is a concern to note that one-fourths of the interviewees observed that free text books are not being supplied on time though they are sufficient. Majority of the officers agreed that the teachers are being given sufficient training and other resources like TLM. However some of the officers in the tribal areas felt that vigorous training for the teachers is needed in view of their low level of qualification. All the respondents are of the view that the trainings have to be conducted during the vacation periods without disturbing the schooling days. It is also observed that the system of lesson plans is not being maintained due to multi-grade teaching. Separate curriculum is required for the tribal areas with due consideration of the cultural needs. Selection of regular teachers is a centralized system of the concerned district and hence all those selected are qualified and trained candidates only. Vidya Volunteers (VVs) are being appointed by the concerned DEO and some of these VVs are not as qualified as those recruited as regular teachers. Some of the officers working in the state border areas are of the opinion that children are very familiar with the language of the border state and the newly appointed teachers do not know the language of the border state and it is taking lot of time to get adjusted for both the teachers as well as children, affecting the quality of education. These officers suggested the introduction of border language as medium of instruction in these schools.

Quality of Schooling

All the respondents observed that basic education is very much useful in their respective communities. Reading, writing, fluent speaking, and story writing are the important qualities of basic education as commented by all the officers and these are being done in all the government schools. But private schools are not following all these principles. In

tribal areas, some of the parents are unable to send their children to schools due to non-existence of primary schools in their locality and they are not sending these children to tribal welfare hostels fearing that these children cannot stay without their parents. However, all are in unanimity that the issues of quality and relevance not influenced the parents not to enroll children in the school. But one-fifths of the interviewees commented that parents are not showing interest in the children's education. Half of the officers opined that about 50 per cent of the teachers are not discharging their duties properly. In the words of an urban DEO on quality education, "*The private institutions have become so commercial and this education is not having the quality as compared to the government schools. The private institutions are demanding huge amounts as donations and tuition fee, but surely missing out the quality of teaching and learning as well. There is no scope for the student to think innovatively and no opportunity to exhibit his creativity, this itself speaks about the private institutions, but in order to induce belief in government schools among the people, a multifaceted revolution has to take place. Many things in the present education system have to be changed. Besides, the government schools should introduce the English medium in order to decrease the number of children joining the private schools and this fulfils the parent's dreams of providing their children education in English medium. However, teaching in mother language is far better in the aspects of understanding when compared to English medium but the parents have inclination towards the English medium education. In recent times, many activities are taken up to improve the standards of Government schools which resulted in closing of three private schools. Hence, the bottom line is the quality will be the prime factor for the parents*". It is also pertinent to mention innovative method adopted by an urban DEO in the backward region to improve the quality of education. To quote him "*during the Collector's visit to a school he understood that students are finding it difficult to understand English. And some of them even don't know how to refer a dictionary. The District Collector took initiative and gave the students (without cost) modules of ING forms which was of great help to the students in improving their understanding the English words. When countered the respondents on why some schools are getting top stars and others are getting low stars and on the possibility of replicating the methods followed in the top star schools, majority observed that integrity of teachers and their commitment to education, active involvement of community and effective supervision are the major reasons for getting top stars and these can be easily implemented in the low star schools if the community took interest. Regarding the commitment of teachers, one of the Project Officers has commented that "*one dedicated teacher in his area has transformed the school in a short period which increased the student strength from 400 to 1700 in a span of two years forcing the closure of many private schools in that area*". It is also noticed that negative attitude of the teachers (engaged in private activity), non involvement of the community, handling the classes*

by the non-qualified vidya volunteers and continuous use of mobile phones by the teachers are the major reasons seen in the poor performing schools. Cultural factors such as addiction to liquor by the students as well as teachers in some places also contribute for the low performance. All the respondents are in unanimity that they cannot take any action on the teachers who are working in the low performing schools in view of the service conditions. Recognition and encouragement of teachers will help in getting good results. Increased monitoring, establishment of squad teams for monitoring, posting the required number of teachers, motivation of parents and community leaders, posting of trained English medium teachers in the success schools, appointing local qualified teachers with adequate training especially in the agency areas, infrastructure facilities especially drinking water and play ground and separate curriculum for the agency areas are needed for improving the quality of schooling. Some of the officers, irrespective of the region, observed that primary schools can be established at mandal level instead of running the primary school in each village by providing transport facilities and there will not be any additional financial burden on the state government. On the measures for improving the quality of schooling, one of the MEOs commented that "*All the stake holders including teachers, parents, students and the community should work together to attain the objectives. Discussions on good schools held at the School complex meetings should be properly implemented by the teachers*". All the respondents are in unanimity that they have to follow the orders of the higher ups and cannot act independently. However, very few officers are courageous in taking decisions in the interest of students and getting orders from the district level officers at a later date. Majority observed that teachers should not be entrusted with non-academic activities. 85 per cent of the interviewees are of the view that teacher absenteeism is a major issue. Lack of transport, long distance travel, active involvement in their personal activities, preparation for higher courses, lack of proper accommodation especially at agency areas and health problems are the major reasons for teacher absenteeism. Regular monitoring by inspecting officers, punishing the absentee teachers, dedicated headmaster and active involvement of the community may help in reducing the teacher absenteeism. 85 per cent of the respondents are of the opinion that Teachers' Unions are not a hindrance in dealing with the issue of teacher absenteeism.

Private and Public School Choice

English medium of instruction is the major force driving the parents to send their children to private schools according to all the officers interviewed. Parents are under the impression that in private schools, teachers give attention to the children's education, more number of school hours as well as working days, regular home works, regular parent - teacher meetings, transport facilities, regularity of the teachers, constant

supervision by the management, child achievement progress cards, extracurricular activities and better infrastructure facilities are the other reasons influencing the parents. Most of the interviewees agreed that there is no gender disparity in choosing the private schools. One of the DEOs opined "*The students are interested to study in the private schools because the parents feel that their children should study in English Medium and the teaching in government schools is not as good as in private schools. The private school management is providing science equipment, bus facility and computer labs to attract the children. The parents believe that the private school teachers are committed, they teach with interest and they regularly give homework. There is no gender disparity in the admissions into private schools. The people with high social status and more money are sending their children to the private schools*". Private schools are within the reach of the people according to 80 per cent of the respondents and some of the private schools are also offering the parents to pay the fees in easy installments and also giving relaxation in the timing of payment. But private schools are rarely seen in tribal villages and economically backward villages in plain areas. Irrespective of the social category, those households who can afford the school fees are sending their children to the private schools. But all the officers are of the opinion that there is no difference in student achievements between private and public schools. One Deputy Inspector of school commented that "*The bias attitude of the parents for private schooling is not healthy, and most of the private schooling fails to maintain the teaching standards and creates a pressure cooker atmosphere which ultimately hinders the personality of students, and a strong motive for successful results is although good but the process to reach it is dampening the ultimate goal i.e. mental and physical growth of a student. Though government schools do not have the demerits as that of private schools, the government school staff has to put up all the efforts to lift its standard. Finally though there is handsome yielding of results in private schooling they are not useful, the government results are good comparatively as they are more fruitful than the private ones. A fine example for this is: majority of students clearing the competitive exams such as IAS, IPS and Group-1 service studied in the government schools*". None of the officers interviewed agreed the concept of only the poor opt government schools and it is opted to recall the view one of the MEOs "*It is a wrong concept that the parents with poor economic status are only sending their children to private schools*". Similar statement is noticed from another colleague "*I strongly oppose that only poor people send their children to government schools*". There is a need for reforms in the government system such as introduction of English medium from primary level, substantial increase in monitoring, and regularity of the teachers to enhance the enrolment in government schools. Other officer commented that "*The department of school education has to work out to remove the stigma that the government teachers don't teach properly. We have to educate the parents that the private schools have less competent teachers and low infrastructure facilities. All round development can be possible*".

only in government school. The rules for giving permission to private school must be regularized. We have to curtail the undue authority of local political leaders on education policies and the permission to local private schools".

Interestingly an officer working in the metropolitan city observed that "In private schools, they advertise about their students' performance by spending huge amounts, but government schools don't publicize the performance of their children. Minimum publicity on the performance of the children studying in government schools will yield huge results in the enrolment". 91 per cent of the officers interviewed have advocated the introduction of English medium from the primary classes and this will enhance the enrolment in government schools though one third have agreed that teaching in mother tongue has added advantages for the students. Some of the officers are quite open that government schools have to be closed in another 5 to 6 years if we do not introduce English medium from the primary level. Many are of the view that parents are under the impression that if children studied English medium they will get more employment opportunities. For instance, an officer commented, "*English medium classes are essential to compete with the private schools. Teachers should be trained to teach the subject in English medium. English is going to be introduced from Class I from the current academic year. At present English medium is introduced at Class VI that will be a problem for both the teachers and the children. Free and good English medium education will surely attract many students towards the government schools and the popularity of private schools will be reduced drastically*". There are also suggestions for introduction of lower kindergarten and upper kindergarten in government schools. To quote another officer "*In this place, English medium private schools advertise much and they grab all the intelligent students by offering discount in school fee and other expenditure. People get attracted to it easily. Only poor families, who are unable to pay the fee in private schools, are sending their children to the government schools. In order to increase the number of students in government schools and to help poor families, we need to have some government English medium schools*".

Policy Programmes

Hostels, Kasturiba Gandhi Balikala Vidyalaya (KGBV) Schools, Free Textbooks, Mid-Day-Meals, free uniforms, worksite schools, success schools and free bus passes are the different policies/facilities implemented to address the issue of education. Free text books, uniforms, mid-day meal and free bus pass policies are omnipresent in the state. KGVB schools, hostels, success schools and worksite schools are not widely spread. All the interviewees agreed that mid-day meal scheme and success school programme is very much useful to the poor and poorest of the poor. All are in unanimity that the mid-day meal programme has enhanced the enrollment in the government schools. However majority are of the opinion that the meal programme is taking their teaching

time and many a times bills have not been cleared in time causing difficulty in maintaining the daily menu. Continuing the same cooks of the meal programme is also causing administrative/management problems. To cite, *"MDM programme has increased the percentage of enrolment. But it has lead to wastage of time on the part of the teachers because they are going to the kitchen-shed very often to monitor the cooking process. The cooks have not been changed for years which have not been giving fruitful results"*. In the capital city of Hyderabad, the meal programme had been entrusted to NGO i.e. Nandi Foundation and officers including teachers and children are happy with this arrangement. Half of the respondents contended that success school programme could not get the desired results due to lack of trained teachers for English medium. Besides, students do not have basic knowledge in English language. All have argued that English medium has to be introduced from Class-1 instead of Class-VI. In the words of one of the respondent, *"the SUCCESS Schools have become mere failure because of lack of qualified teachers, the existing teachers are not well trained to teach E.M. and the students have no basic knowledge in English. The central syllabus was so difficult so it has been changed to state syllabus. Now it has become easy for both the teachers and the taught. Instead of starting EM from Class VI, it should be started from Class I. Some of the students after studying for one or two years in English medium have changed to Telugu medium"*. Some have also observed that it is difficult to recruit the qualified English medium teachers and hence proposed to impart more training to teach in English medium to the existing teachers. Everybody participated in the interview is aware of RTE Act and 97 per cent of them attended the meetings convened in connection with the RTE. 94 per cent agreed with the provisions contained in the act. All are positive on the effectiveness in improving the quality of education and in ensuring access to quality education to all the children. One of the officers expressed that *"I have a sound knowledge of R.T.E. 2005 which has been introduced in 2009. According to the act all the school age children must be in the school. We have conducted meeting with village Sarpanch and local leaders and they in turn propagated that all the children should be sent to school and sending the children to work is a crime. The government has to provide all kinds of facilities to the students. About 25 % of seats must be reserved for the children from below poverty line in private schools"*. Another officer added that *"Teacher pupil ratio also must be maintained otherwise action can be initiated against authorities. The process of rationalization has been taken as per the act. The act will yield desired results when the common man comes to know about act and its implementation"*. Increased monitoring and increased awareness to the parents are the two important areas to be addressed for ensuring the quality education as contended by all the officers. 60 per cent observed that the present examination system is working well and 40 per cent differed with this view. For instance, *"The policy must be changed from time to time to get the desired results. Exams must be conducted from Class-I itself."*

There should be more objective type questions. Mathematics should be given top priority from Class III itself and more importance to the application model". Another view is that open book system has to be implemented to avoid copying in the examination. Continuous monitoring, regular parent - teacher meeting will reduce the absenteeism among the teachers and children respectively. Visiting the houses of out of school children, and counseling to parents and children will bring back, out of school children to school and reduce the dropout rates. 88 per cent of the respondents are of the view that remedial teaching is being done regularly all the officers agreed that leadership matters in the improvement of issues relating to education.

Sum up

In tune with the Global monitoring reports (GMR), Young Lives school based component tried to capture the perceptions of 33 Education Officers (EOs) and found out that people are interested in educating their wards, irrespective of social strata while drop-outs are noticed in Scheduled Tribes, family discord, frequent shifting of base being the other reasons. Teacher absenteeism is prevalent in tribal areas due to insufficient monitoring which is a result of vacant posts.

Training to teachers and special monitoring will improve the standards of education. Separate curriculum is required for STs in accordance with their cultural needs.

Half of the teachers are not discharging their duties properly and community vigilance is needed to address this problem.

Gender discrimination is not found in education and government programmes have an impact on the education.

English should be introduced from primary classes. More number of classes, more interaction with parents, constant supervision and extracurricular activities will help improve the quality of education. Publicity of the achievements of students will also improve the enrolment.

Government schools at mandal headquarters with transport facilities will also add to the improvement of the quality of education.

Lack of qualified teachers is a hindrance and majority of people are happy with the present examination system.

Appendix-1

A brief about the Young Lives Study

Young Lives is an innovative long-term international research study, investigating the changing nature of childhood poverty. This Appendix briefly outlines the aims of the project; the partners in the study; what Young Lives does differently; what exactly is 'richer' about the data set and what is value added in the study.

The core objectives of the Young Lives study are:

- i) to pilot, develop, and document an innovative methodology in which multi and interdisciplinary research using a mix of qualitative and quantitative methods to provide evidence on childhood poverty that feeds directly into and informs policy options and development education.
- ii) to generate and archive good quality, multi-dimensional data about the experiences, conditions, strategies and perspectives of children in poverty
- iii) to trace the factors that impact positively and negatively on childhood poverty and identify, as far as possible, appropriate preventive and ameliorative measures to reduce poverty and increase wellbeing in affected children, both in case study countries and globally
- iv) to disseminate and publicise findings from this research to a wide audience of academics, policy makers and practitioners
- v) to foster public concern about, and encourage political motivation to act on, childhood poverty issues through advocacy and media work at both national and international levels.

Ethiopia, India (Andhra Pradesh), Peru and Vietnam are partners of the Young Lives study with headquarters at the Oxford University, UK. These countries were chosen as study countries because they reflect a wide range of cultural, political, geographical and social contexts in which children grow up. A unique initiative that combines cutting edge research with policy analysis, dialogue and influence, the Young Lives study explores the views, experiences and circumstances of two age cohorts of children in these four countries. Further, Young Lives seeks to improve understanding of the causes and consequences of childhood poverty and inform the development and implementation of future policies and practices that will reduce childhood poverty. In India, Young Lives sample was taken from the state of Andhra Pradesh.

APPENDIX-2

YOUNG LIVES METHODOLOGY

In India the Young Lives Project is being implemented in Andhra Pradesh, a state in South India. Andhra Pradesh was one of the first states in India to initiate the reform process for fiscal and institutional restructuring at the state level. Besides, the state has been the role model for several new initiatives taken simultaneously during the 1990s to eliminate poverty. Therefore, the performance of Andhra Pradesh with respect to some important indicators on child poverty needs to be examined. For this purpose data on various indicators of welfare are compiled from different sources which can serve for comparisons of the indicators that are being estimated from Young Lives data. The major sources are national level reports like the National Sample Surveys of different rounds, Census of India Reports, Reports and statistics compiled by Ministry of Human Resource Development, and state level reports like the Statistical abstracts of Andhra Pradesh, Selected Educational Statistics, Multiple Indicator Survey- 2000- Andhra Pradesh, NFHS surveys, Sample Registration System (SRS). Other reports include National Human Development Report, 2001, Andhra Pradesh Human Development Report, 2007 and Indian Development Reports, India education Report 2002 and Educational Statistics, 2008-09 published by Commissioner of School Education, Government of Andhra Pradesh.

Quantitative Research-Young Lives Sampling Strategy

Administratively, the state of Andhra Pradesh is divided into 23 districts, each of which is again divided into several mandals (sentinel sites/blocks) depending on its size. Altogether there are 1125 mandals in the state. The number of villages in a given mandal generally varies between 20 and 40 and can be over 200 in the case of tribal mandals. The total number of villages in the state is about 27000. In general a village in the state consists of a main village and a few (2 to 5) hamlets or small settlements. In the case of tribal villages, the number of hamlets is higher. Typically the state can be divided into three distinct agro-climatic regions viz. Coastal Andhra, Rayalaseema and Telangana. The Young Lives sampling scheme is designed taking into account the inter-regional variations. A priori, it was decided that

- 1) The sample districts are to be distributed uniformly across all the regions to ensure wider representation.
- 2) From each region one backward and one advanced district would be selected

- 3) The criterion for classification of districts as backward and advanced is based on development ranking.
- 4) While selecting the districts (and mandals within the districts) among the poor, due consideration was given to important issues relevant for the study. Also, the final selection was done among districts where 'Andhra Pradesh District Poverty Initiatives Program (APDPIP)', which has a great bearing on the child poverty, was implemented.

The district of Hyderabad is totally urban and is a metropolitan in nature. Therefore the samples from Hyderabad were selected separately on different criterion.

Selection of Districts

For the purpose of classifying the districts into backward and non-backward groups, the districts within each region were ranked based on their relative level of development. The relative ranking of districts was based on the following indicators.

Economic Indicators

1. Percentage of Gross Irrigated Area;
2. Per capita Income:
3. Percentage of Urban Population:

Human Development Indicators

- 1 SC, ST Population:
- 2 Female Literacy:
- 3 Infant Mortality Rates:
- 4 Percentage of Children out of School (5-14 years):

Infrastructure Development

Total Road Length per 100 Sq. Km

Number of Banks per 10000 population

Number of Hospital Beds per 10000 population

Relative development index was constructed following rankings method. For aggregating the sectoral ranking, we have assigned weights - Economic- 30; Infrastructure-30; and Human Development-40. Based on the relative development index, a basket of backward and developed districts were selected in the first stage. The final selection of districts

was made from the identified basket of districts. From Coastal region three backward districts identified were Srikakulam, Parkas and Vizianagaram. The APDPIP was being implemented in Srikakulam and Vizianagaram districts. Among the two, Srikakulam was selected since migration is an important issue in this district (observed from APDPIP baseline survey). Among the developed districts, West Godavari was selected as it is not an extreme case of high development and would be a better representative of the rest of the non-poor districts of Coastal region.

In Rayalaseema region, Ananthapur is the only district where APDPIP is being implemented. With the lowest rainfall in the State, the district is declared as drought prone area. Also, in this district UNDP-SAPAP programs based on community mobilization were launched long ago with considerable success. Therefore this district was preferred. Among the developed districts, Chittoor is more urban and developed than Kadapa. Therefore, Kadapa was selected for the survey. In the Telangana region, Adilabad and Mahaboobnagar are the two districts where APDPIP is being implemented. Since Adilabad district is predominantly a Tribal populated district and would be an extreme case for the survey, the district of Mahaboobnagar was opted for the study from these two districts. Among the developed districts, Rangareddy is close to Hyderabad, the state Capital and cannot serve the purpose. Both Nizamabad and Karimnagar exhibit similarities in terms of development. However, most of the NGOs with whom consultations were made, suggested Karimnagar as the most suitable district for this survey, hence, Karimnagar was selected as the advanced district in Telangana region.

List of Districts Selected for the Survey

Region	Poor	Non-Poor
Coastal	Srikakulam	West Godavari
Rayalaseema	Ananthapur	Kadapa
Telangana	Mahboobnagar	Karimnagar

The selected sample districts account for about 28% of the state population (excluding Hyderabad) and cover about 318 mandals out of the total 1119 mandals (excluding Hyderabad).

Selection of Sentinel Sites (Mandals) within the districts

The second step of sampling involves selection of sentinel sites. It was decided to select one sentinel site from the city Hyderabad. The rest of the 19 sentinel sites are distributed across the six selected districts. The methodology that was followed in the selection of districts was adopted for the selection of sentinel sites (mandals) also. The list and distribution of the sample mandals are available on the Young Lives web site.

Selection of Villages within the Sentinel Sites

The next step of sampling involved selecting the villages where the ultimate sample units, the children have to be located. Since a mandal comprises over 20 villages, the sample had to be spread uniformly all over the mandal. For this purpose, the mandal was divided into four contiguous geographical parts and one village was selected randomly from each part. While doing so, care was taken to see that the population in the selected four villages together would be sufficient to give sample of 100 children. However, in a few cases one or two more villages had to be selected as the required number of children were not found in the sample villages selected initially.

For the urban areas, the municipal wards are taken as communities and accordingly, sample wards are identified following the above principles. However in Hyderabad city, three slums were selected for the survey. Care was taken to select slums in different parts of the city and different composition of religions - an important factor in the city of Hyderabad. A total of 101 villages and hamlets (communities) covering 20 mandals (clusters/sentinel sites) were finally selected for round-1 and were now re-surveyed to locate 2016 younger cohort (one-year-old children in the year 2001-02) and 1008 older cohort (eight-year-old children in 2001-02) and administered the survey questionnaires. In addition detail information was collected in 98 communities through community questionnaires. The list of communities surveyed is available in the web site.

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