Chapter 4: Analysis of Data

RTE Act 2009 guarantees elementary as a right to all children. As mentioned earlier, the purpose of special training is to bridge the gap between the academic age and the biological age of OOSC once they enrol in to some school. The OOSC have the right to be enrolled into an age-appropriate (AA) class as discussed in previous chapter. Hence ST constitutes all the processes and systems that are aimed at mainstreaming the child into the AA class. The aspects that ensure an effective ST include - numerous scholastic aspects of the child, metrics of the school, the teachers and also the methods of evaluation to assess whether the child has achieved AA competencies. Besides this the other socio-economic and cultural aspects that impact ST are beyond the purview of this study.

Essentially, this study analyses the data dealing with the important components that impact the effectiveness of ST namely - the quantum of OOSC children, the complexity in assessment of age-appropriate class and finally the model of delivery of the ST itself. These are laid out in the following sections of this chapter.

Section - 1: Analysis of Out of School Children (OOSC) in India

World over, education of out of school children, has been a matter of great concern of all nations - under developed, developing and even some developed nations. The numbers have been steadily decreasing due to concerted efforts of governments and NGOs. The second Millennium Development Goal (MDG) calls for the achievement of universal primary education by 2015. World civic organisations such as UNESCO, World Bank and IMF, all have been closely involved in bringing OOSC to school and ensuring their retention thereafter, at least till elementary education level.

UN website fact sheets (UNESCO, UIS Data Sheet, 2011)indicated that though many poor countries have shown significant increase in school participation, Sub-Saharan

Africa and Southern Asia were still home to the majority of out-of-school children. At the existing rate of progress, the goal is unlikely to be attained in many countries. In order to maintain a high priority within the Education for All (EFA) agenda and renew the efforts, UNICEF and the UNESCO Institute for Statistics (UIS) launched the Global Initiative on out-of-School children in 2010 to accelerate efforts towards the goal of universal primary education by 2015 (UNICEF OOSC, 2014).

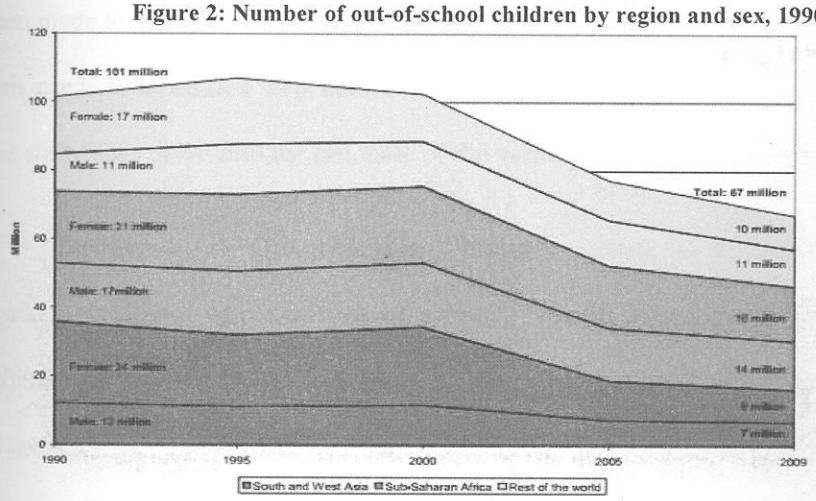
The goal is to achieve a breakthrough in reducing the number of out-of-school children of primary and lower secondary school age. Numerous methodologies have been evolved for estimating the number of primary school-age children who are out of school while presenting national, regional and global estimates for this indicator. The Global initiatives aim to improve the statistical information and analysis regarding out-of-school children, to identify the factors that contribute to their exclusion from schooling and to assess the effectiveness of existing policies. This study involves itself with the estimates of OOSC to make an assessment of the impact of special training in achieving the MDG of universal education.

World Scenario

According to new data from the UNESCO Institute for Statistics (UIS), 67 million children were out of school globally in 2009 (see Figure 2) This figure has been falling, especially since 2000, when the international community reinforced commitments to achieve Universal Primary Education (UPE). Since then, the share of out-of-school children of primary school age has fallen from 16% to 10%. In addition, efforts to improve educational access for girls have yielded positive results. In 2009, girls accounted for 53% of children out of school compared to 57% in 2000. Yet despite this progress, the pace of change appears to be slowing. The new data underscore a central message of the 2011 edition of the Education for All Global Monitoring Report: "the world is not on track to

achieve UPE by 2015". Moreover, it will be increasingly difficult to reach those children who remain excluded from education due to the complex nature of inequities associated with gender, ethnicity, wealth and location (UNESCO, UIS Data Sheet, 2011)[15]..

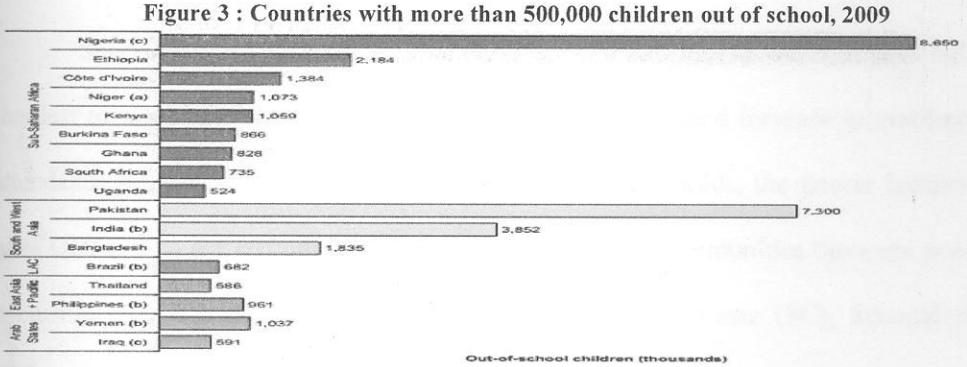
Figure 2: Number of out-of-school children by region and sex, 1990-2009



Source: UIS database, 2011.

It is comforting that the numbers have been steadily decreasing on account of several World level and National initiatives. But are we doing enough -is a question that haunts all governments alike. There were 17 countries with more than 500,000 out-of-school children in2009. Nine of these countries are located in sub-Saharan Africa.

Figure 3 : Countries with more than 500,000 children out of school, 2009



Source: UIS database, 2011.
Notes: a: Data refer to 2010; b: Data refer to 2008; c: Data refer to 2007.

[15] No. 12

Indian Scenario

India is not faring well in Asia only behind is trailing even behind Pakistan (see Figure 3). The numbers are a matter of concern. In India too, due to concerted efforts at national level in terms of Universalisation of Education since 2001, a lot of progress has been made to bring the OOSC to school. There is also a debate on the definition of OOSC. This needs to be settled well before we can estimate the numbers that need ST. however, this study does delve into the rationale of the various definitions adopted by India.

Definitions of Out-of-School Children. There is no standard definition for clarifying children who are "out of school". Varied approaches have been adopted in different parts of the India. For clarity on the concept, the following standard definition is suggested - "A child 6-14 years of age will be considered out of school if he / she has never been enrolled in an elementary school or if after enrolment has been absent from school without prior intimation for reasons of absence for a period of 45 days or more" (MHRD Guidelines, 2013)[16]. These Guidelines were formulated by MHRD in 2013 and issued to all State Governments only as suggestions. The operative part is that the quantum of children who never attended school itself is very large and is further worsened if absenteeism and drop out is also factored in.

Several studies have shown that children who still remain out of school fall in the 'hardest to reach' or 'most vulnerable' categories. While rapid increase in enrolment and attendance has occurred among children from poor households, the poorer localities still have OOSC who are left out of the system. Within local communities there are pockets of exclusion from schools, with high presence of Scheduled Caste (SC), Scheduled Tribe (ST), street children, orphans/homeless children, migrant children, de-notified/ primitive tribal groups etc. Gender is a cross-cutting category which overlaps other disadvantages.

[16] Guidelines formulated by MHRD in 2013 and issued to all State Governments as suggestions as Right of Children to Free & Compulsory Education Act, 2009/ Sarva Shiksha Abhiyan Interventional strategies for Special Training, pp 4

While the "never enrolled" children maybe increasingly integrated within the system over the next few years, the issue of drop outs will need sustained mechanism to address it. Besides social and economic reasons, the school system has perhaps been unable to connect with vulnerable children and make the education process relevant and valuable for them. School dropouts cite lack of interest in school, negative experience in schools and a sense of under achievement, as the primary reasons for dropping out, in many surveys (MHRD Guidelines, 2013)[17].

Estimate of OOSC in India

Large number of bodies both at international and notational level use different norms for estimating the OOSC. In India, the analysis by the administrative agencies, NGOs, researchers and house-hold surveys are at large variance. Some of the administrative data sources are - Statistics of School Education (SSE), All India Education Survey (AIES), District Information System for Education (DISE) and Unified District Information System for Education (UDISE), amongst others. Some of the household surveys are - Population Census, National Sample Survey Office (NSSO) Surveys, National Family Health Survey (NFHS), Surveys of Out-of-School Children (SRI-IMRB), SSA household surveys, SSA Child Tracking Surveys (CTS), India Human Development Survey(IHDS) and Annual Status of Educational Report (ASER).

Administrative data sources supply regular data of the formal schooling system at a disaggregated level. But they have only limited coverage of unrecognised and private schools. Among these various sources, DISE data has become a very useful planning tool for elementary education at state and district levels on account of its improved coverage and regularity. However, estimates generated for the country as a whole have major problems because of the existing state-level variations (UNICEF OOSC, 2014). There is no

[17] Pp 5

information on the number of 11 to 13 year old children who study above grade 8. For instance Kerala, Andhra Pradesh and Odisha have grades 1 to 7 (instead of grades 1 to 8). As a result, in some states/districts class 8 enrolment data is not included in the reporting on the upper primary level. Also, since the enactment of RTE, the official age of admission in Class 1 is 6 years. But state norms are not uniform and the age of admission remains 5 years in several states. DISE data calculates overage and underage enrolment according to the age norms in a particular state, and so it is difficult to interpret these statistics at the national level. Then, there is also the problem of double enrolment, particularly in states with large numbers of private schools – recognised and unrecognised (UNICEF OOSC, 2014).

The analysis of data of each of these agencies and surveys indicate large variations that can be attributed to - *Definition of school, Definition of attendance, Data collection process, Population projections etc.* This notwithstanding it is important to have a fair estimate of the OOSC profile to be able to assess the ST effectiveness. Analysis made by UNESCO appears to be a reasonable estimate for the same.

Profile of OOSC in India

Effectiveness of ST depends on numerous aspects of the target population of OOSC such as demographic, socio-economic, cultural and geographical aspects of both the OOSC and the schools system. Some estimates of these are enumerated in Table 1 below. Even here, the definition of out of children leads to large variations.

Table 1: Alternate estimates of out-of-school children in 6 to 13 age group, 2009

Out-of-school children according to	Population projection Registrar General of India		Population projection UNPD	
	Proportion (%)	Number (in millions)	Proportion (%)	Number (in millions)

6 to 10 years				
Definition 1	3.69	4.3	3.69	4.5
Definition 2	6.41	7.5	6.41	7.8
11 to 13 years				
Definition 1	5.23	3.8	5.23	3.7
Definition 2	5.73	4.2	5.73	4.1
6 to 13 years				
Definition 1	4.28	8.1	4.28	8.2
Definition 2	6.15	11.7	6.15	11.9

Source: Calculated from SRI-IMRB 2009 data, population projections from RGI, 2009 and UNPD 2009 (2012 revision).
Definition 1: OOSC are children who have never been enrolled in pre-primary schooling or above, and those who have dropped out from pre-primary schooling or above, covering both formal and non-formal education facilities.
Definition 2: OOSC are children who have never been enrolled in Class 1 and above, and those who have dropped out from Class 1 and above, in formal education facilities.

It is seen that, in 2009, 11.9 million OOSC are children who have never been enrolled in Class 1 and above, and those who have dropped out from Class 1 and above, in formal education facilities. We will see later that the figures have been dropping steadily. Certain other estimates of the profile of the OOSC will enable better comprehension of the problem in hand. The design of the ST will need to factor in the rural-urban and marginalised groups distribution in a geographic area. Strategy for retention of OOSC, (see Table 2) assumes greater significance with regard to Below Poverty Line (BPL) families.

Table 2 : Percentage distribution of children (6-13 years) in different social groups among BPL and APL households, 2009

	Rural			Urban		
	BPL	APL	All	BPL	APL	All
SC	26.1	16.2	20.1	21.7	14.7	16.1
ST	17.0	9.9	12.7	7.9	3.6	4.5
OBC*	30.2	35.0	33.1	27.5	25.1	25.6
Others*	16.1	26.0	21.1	20.9	39.1	35.4
Muslim	10.6	12.9	12.0	22.1	17.5	18.4
All	100.0	100.0	100.0	100.0	100.0	100.0

*Excludes Muslims. Data on Muslims is given separately in Row 5.

It is remarkable that the gap in school participation rates between male and female children is quite small till the age of 11, and increases after that in favour of males. Table below summarises these differences for the two age groups. It reflects the low proportion of out of school in the 6 to 10 age group and the low gender differences. In the 11 to 13 age group the out of school proportions are higher and so are the gender differences.

Age group (years)	Proportion out of school		
6 -10	3.40	4.04	3.69
11-13	4.77	5.79	5.23
Source: SRI-IMRB 2009 Report			

Regional disparities in the OOSC numbers will impinge on the strategy of implementation of ST. In absolute numbers, Bihar accounts for a smaller number of out-of-school children compared to the much larger state of Uttar Pradesh (UNICEF OOSC, 2014)[18], but as seen from Table 3, the proportion out of school is very high among all social groups, particularly in rural areas.

Table 3 : Locating high proportions of out-of-school children in selected states (by social group, location and gender)

State	Age group (years)	Social group		Location
Bihar	6 – 13	Sc	Rural	Boys, Girls
		Muslim	Rural, Urban	Boys, Girls
UP	6 – 10	Sc	Urban	Girls
	6 – 13	SC, Muslim	Rural, Urban	Boys, Girls
	6 – 13	SC, ST, Muslim	Rural	Girls
Rajasthan	6 – 13	ST	Rural	Boys
Odisha	11 –13	Sc	Rural, Urban	Boys
	6 – 13	ST	Rural	Boys, Girls
	11 – 13	Sc	Rural, Urban	Boys, Girls
		SC, ST	Rural	Boys
West Bengal	6 – 10	SC, Muslim	Urban	Boys, Girls
Gujarat	11 – 13	SC, Muslim	Rural, Urban	Boys, Girls
		ST	Rural	Boys, Girls

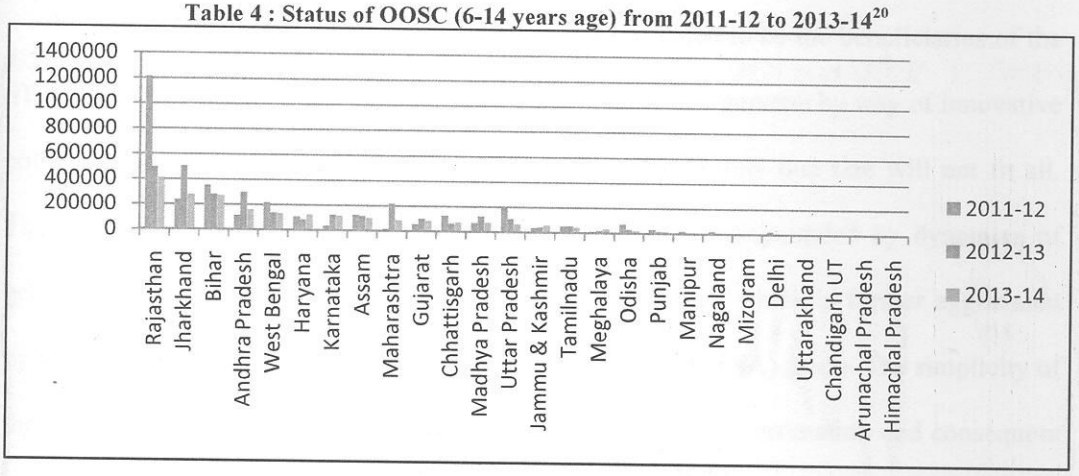
[18] Pp 22

	11 – 13	SC, Muslim	Urban	Boys

Source : A Situational Study : Global Initiative on Out of School Children, Aug 2014 by UNICEF[19], Sec 2.3.4.2 (UNICEF OOSC, 2014)

According to government figures, 2.2 million children in India are currently out of school. The figure is, however, likely to be higher given the absence of a consistent definition out of school children across states and viable mechanisms of child mapping and tracking. The absolute numbers of OOSC of the various states and the trend from 2011 to 2014 is in Table 4 below. States having less than 2500 OOSC in 2014 estimates have not been enlisted in the figure. The OOSC numbers are decreasing in all states which is one indicator of the mainstreaming of the OOSC through ST. State of Kerala has achieved 100% primary education recently in Jan 2016 (RTE Forum, 2014).

Table 4 : Status of OOSC (6-14 years age) from 2011-12 to 2013-14[20]



Inferences of OOSC Analysis

The study has assimilated the differentials in estimations of the OOSC stemming from the definition of school, definition of OOSC and data collection methods. At the national level the overall figures have shown a downward trend over the years of reckoning i.e. from 2011-12, 2012-13 and 2013-14 as 3.2, 2.9 and 2.2 million respectively. Further

[19] A Situational Study: Global Initiative on Out of School Children, Aug 2014.
[20] Status of Implementation of the Right of Children to Free and Compulsory Education Act, 2009: Year Four (2013-14) - Report by RTE Forum accessed at http://www.rteforumindia.org

reduction in 2014-15 can be expected however, the figures are not available in public domain so far. It would be fair to estimate that approximately more that 1.8 million OOSC would be the beneficiaries of the special training. In all the States the figures of 2013-14 are lesser than that of 2012-13. Jharkhand, Andhra Pradesh, Maharashtra, MP and Gujarat have shown an increasing trend in 2012-13 and 2011-12.

As discussed earlier the geographic, demographic, social-economic and cultural factors are likely to impact the effectiveness of the ST. However, an assessment of the age differential between the biological age and the academic age of the OOSC is well in order to estimate the special training requirement and to assess its efficacy there on. This is dealt in the subsequent chapter.

Section 2: Complexity and Estimation of Age-Appropriate Grade

The fact that 1.8 million OOSC in India are estimated to be the beneficiaries of the ST mandated by the RTE act, calls upon all stake holders to intervene by way of innovative policy, responsive implementation and adequate funding. Surely one size will not fit all. The problem of schooling of large numbers of OOSC is compounded by dynamics of geography, demography, socio-economic factors and literacy which is further aggravated by the mandate of admission of the OOSC to age-appropriate (AA) grade. The simplicity of the phrase 'age appropriate' actually hides the complexity of its estimation and consequent implementation.

Closer look at the constituents of age appropriate grade reveals two aspects. The *biological age* and the competency based *academic age*.

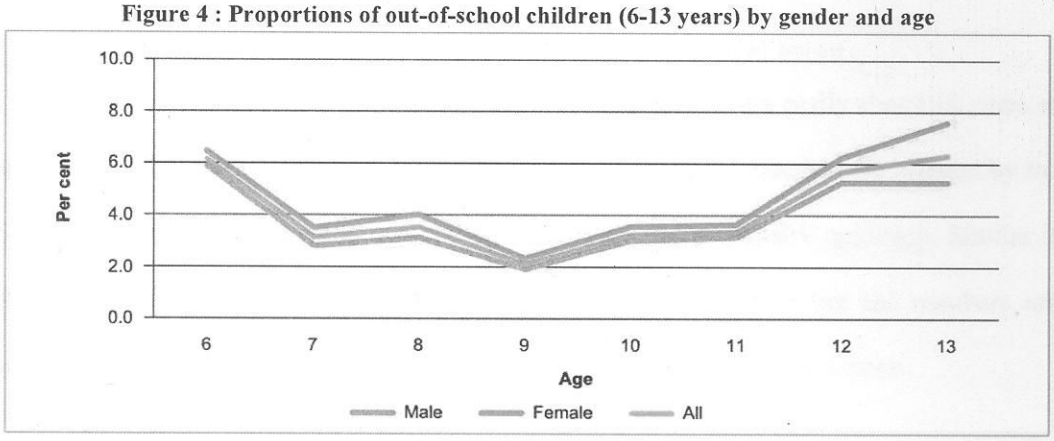
To a common man the assessment of biological age may seem banal. But, in a country like India, given her geographic expanse and low levels of literacy, this can be challenging especially in remote and inaccessible areas. Even today, registration of births

and deaths is not committed to the record keeping agencies but is merely in the living memories of people there. The study does not propose to involve itself with the complexity of age assessment/fixation. When the RTE Act mentions children between 6 and 14 years, it refers to children who have completed 6 years, and are below 14 years of age (that is the children have completed 13 years). The grey area is left as it is. Now these children are to be mainstreamed into an age appropriate class and thereby to elementary education. Here in lies the challenge.

Proportion of out-of-school children: National level

An overall picture (see Figure 5) of 6-13 year old children, age-wise, who are out of school, shows that 6 per cent of children are not enrolled in pre-primary and above in formal schools at 6 years. However, many children enter school late which is reflected in the decline in out of school proportions till the age of 9. The proportion of out-of-school children remains below 4 per cent till the age of 11, and from 12 onwards the proportion increases. It is remarkable that the gap in school participation rates between male and female children is quite small till the age of 11, and increases after that in favour of males (UNICEF OOSC, 2014)[21].

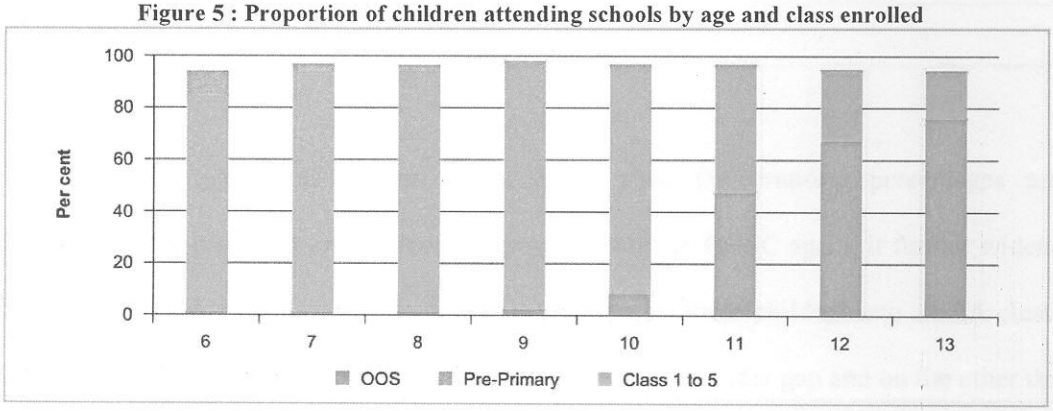
Figure 4 : Proportions of out-of-school children (6-13 years) by gender and age



[21] Pp 15

Complexity of the issue can be estimated from the Figure 5 which gives the detailed breakdown. Each stacked column gives the proportion of children of a specified age in the 6-13 age groups who are out of school, and enrolled in pre-primary, primary, and higher grades. It re-emphasises the fact that the children's progress through school is not smooth. As mentioned earlier, several states have 5 years as age of entry for class1, and so a few 10 year olds are found enrolled in the upper primary stage. However, children who are overage for their class are a more common phenomenon. This includes a significant proportion of 6 year olds (9 per cent) who are in pre- primary grades, and around 40 per cent of 11 year olds, 17 per cent of 12 year olds, and 17 per cent of 13 year olds who are in primary grades (UNICEF OOSC, 2014).

Figure 5 : Proportion of children attending schools by age and class enrolled



Source: SRI-IMRB 2009 unit level data

The lower stacks (in dark colour) depict the OOSC who are easily above 10 years of age but have had no school prior. Hence the age differential that needs to be bridged by the ST is that much wider, thereby demanding a focussed and responsive approach. Similar is the case of the enrolled children where the severity is the same but the numbers are comparatively lesser. To these proportions let's incorporate some other aspects.

Error! Reference source not found. below presents an overview of the variations in proportions of children out of school by age group, gender, location, caste and religion.

It shows an interesting pattern in terms of gender. Girls in rural areas have the greater disadvantage in both age groups in most socio-religious categories. In urban areas, and particularly in the 11 to 13 age group, males are more likely to be out of school among all social groups (UNICEF OOSC, 2014)[22].

Table 5: Percentage of children in 6-10 and 11-13 age groups who are out of school, by social group, gender and location (percent)

	SC		ST		Muslim		OBC*		Others*	
	6 to 10	11 to 13	6 to 10	11 to 13	6 to 10	11 to 13	6 to 10	11 to 13	6 to 10	11 to 13
Rural Male	4.9	5.8	5.5	8.5	5.3	9.4	2.5	3.3	1.3	2.2
Rural Female	6.2	8.2	5.4	11.4	6.0	9.4	3.4	5.4	1.6	2.2
Urban Male	4.2	6.1	2.3	3.5	5.6	8.6	2.0	2.5	1.3	1.8
Urban Female	5.7	4.4	2.1	3.4	5.2	7.5	1.3	1.8	1.5	1.4
All	5.4	6.6	5.2	9.3	5.6	9.1	2.7	3.9	1.4	2.1

Source: SRI-IMRB 2009 unit level data. Note: *Excludes children of Muslim background

The complexity is further compounded when the drop-out percentages are introduced. Drop out not only makes the enrolled child an OOSC again, it further widens the gap that needs to be bridged by the ST to mainstream these children into an AA class. On one hand the duration of ST will increase because of the wider gap and on the other the time available to bridge the gap through ST will shrink -a case of double jeopardy for such children.

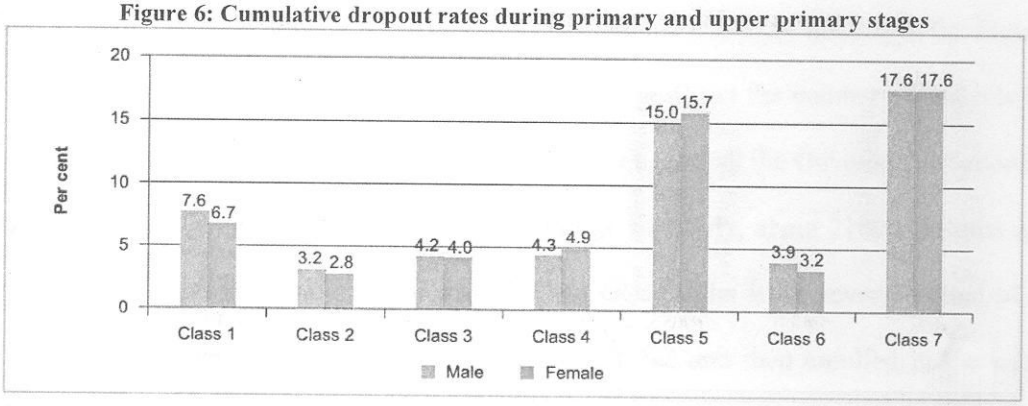
When does "dropping out" become a major problem? Administrative data sources show a dynamic picture of the process of dropping out. Ideally dropout rates should be calculated following a cohort of children over the primary and upper primary stage. But in the absence of time series data, a reconstructed cohort method is used based on enrolment and repetition data of two successive years collected by DISE. Since DISE do not collect

[22] Pp 8

enrolment data of Class 9, it has not been possible to calculate the dropout rate at the end of Class 8 using this method. Dropout rates, repetition rates and promotion rates at the end of grades 1 to 7 are given in Figure 6

Figure 1 below. It is seen that dropout rates are relatively high at 7.2 per cent after class 1 and then quite low in the rest of the primary stage. The dropout rates after class 5 (15.3 per cent) and after class 7 (17.6 per cent) are quite high. It is interesting to note that there is hardly any gender difference in drop out (UNICEF OOSC, 2014)[23].

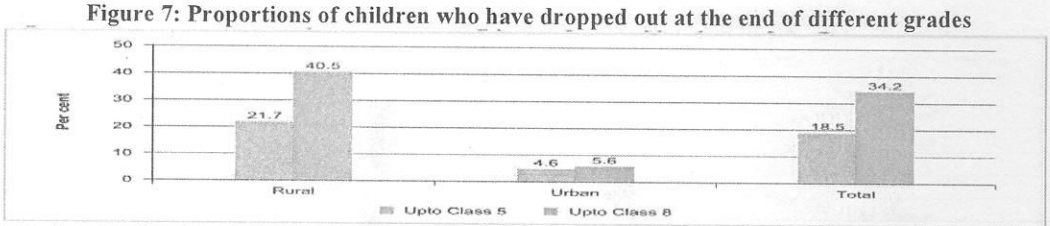
Figure 6: Cumulative dropout rates during primary and upper primary stages



Source: DISE Data 2008-09 and 2009-10

The difference between rural and urban areas is very sharp – dropping out is more prevalent in rural areas and points out that the transition rate between grades 5 and 6 is quite low (see Figure 7). Urban schools score here as transition rates are higher than in rural schools (UNICEF OOSC, 2014).[24]

Figure 7: Proportions of children who have dropped out at the end of different grades



Note: Cumulative dropout rate at primary (upper primary) stage is the percentage of children who enter grade 1 and dropout before they complete grade 5 (grade 8).
Source: DISE school level data, 2008-09 and 2009-10

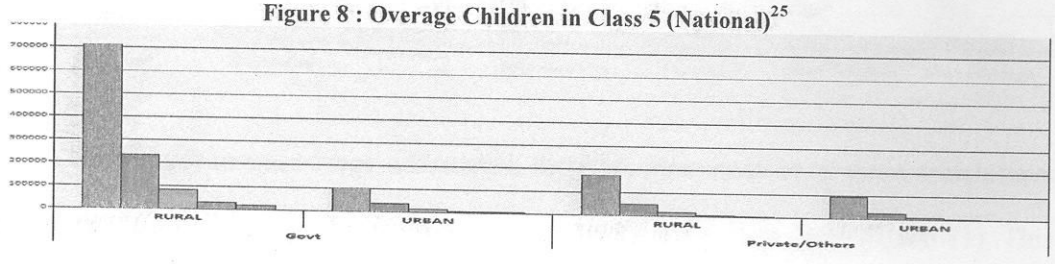
[23] pp 34
[24] pp 35

Proportions and percentages can give some idea but to assess an existing plan and then evolve an action plan, the absolute figures are needed. The study obtained the raw data from DISE regarding enrolment and age of all the school in India for all years from 2010 to 2015. The data set of 2011-12 has been selected since by then the promulgation of RTE act and rules would have matured at the district and Panchayat levels thereby ushering in accuracy in assessing the efficacy of the ST. Analysis of data of 2011-12 has similarly brought out some interesting results.

To get an idea of the complexity of the age differential DISE raw data set for 2011-12 on enrolment was considered. Rural and urban divide is clearly notable in the Figure 8 below. The bars starting from left to right in each case depict the number of students who are overage by 2 yrs, 3 yrs and so on for Class 5. For e.g. in all the Government Schools, in rural areas, over 71,000 children are two years old. Similarly, about 21000 children are 3 yrs old for class 5 and so on. These are not the OOSC who were never enrolled of that period. These are students who were at least identified and then enrolled in the school. Notably there is age differential in private school too.

As the age differential increase the numbers drop in all categories. It must be borne in mind that with every increasing biological age of the child, the academic age differential also widens by that much more, thereby necessitating administering special training longer and perhaps more intense.

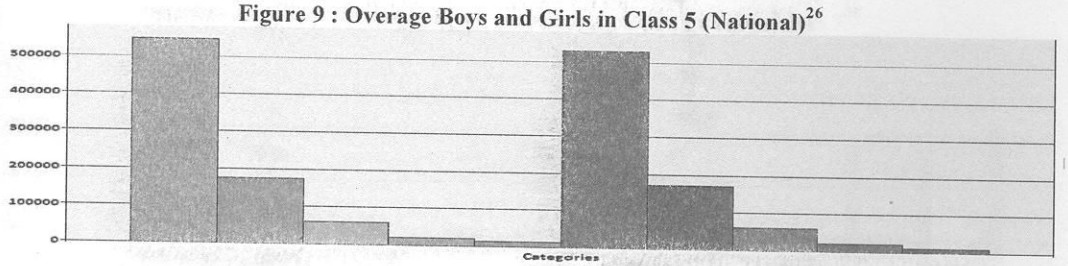
Figure 8 : Overage Children in Class 5 (National)[25]



[25] Tabulated by the author from DISE raw data of 2011-12

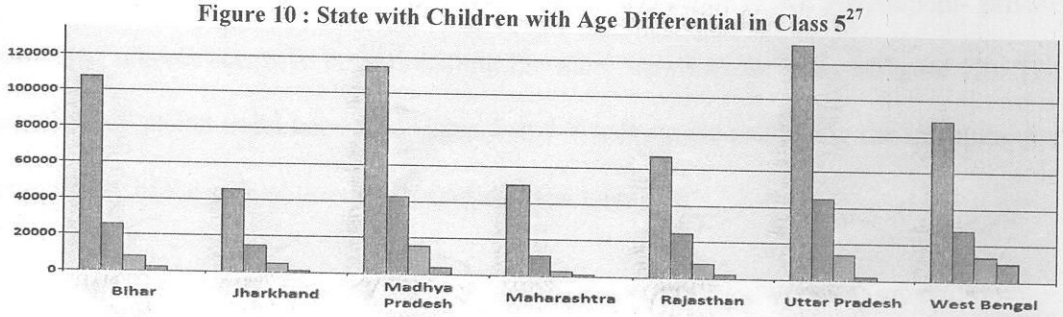
The Figure 9 below is the depiction of the age differential amongst the boys and girls in class 5 in all school in India. Notably the gender equality exists here too. The left most set of bars are for the boys and in that the left most bars depict an overage differential of 2 yrs, the next bar is for 3 yrs overage, $ years overage and the last 5 years overage. Similarly the right sets of bars are for girls. As the age differential increases the numbers drop. But that is no solace since the degree of difficulty in administering special training for these overage children keeps increasing with each passing year.

Figure 9 : Overage Boys and Girls in Class 5 (National)[26]



The Figure 10 below gives an idea of age differential in the states. The list is only of the states in which at least 10000 children who were 2 years overage for class 5. Other states with lesser numbers have not been included in the analysis. The numbers deplete as the differential goes up.

Figure 10 : State with Children with Age Differential in Class 5[27]

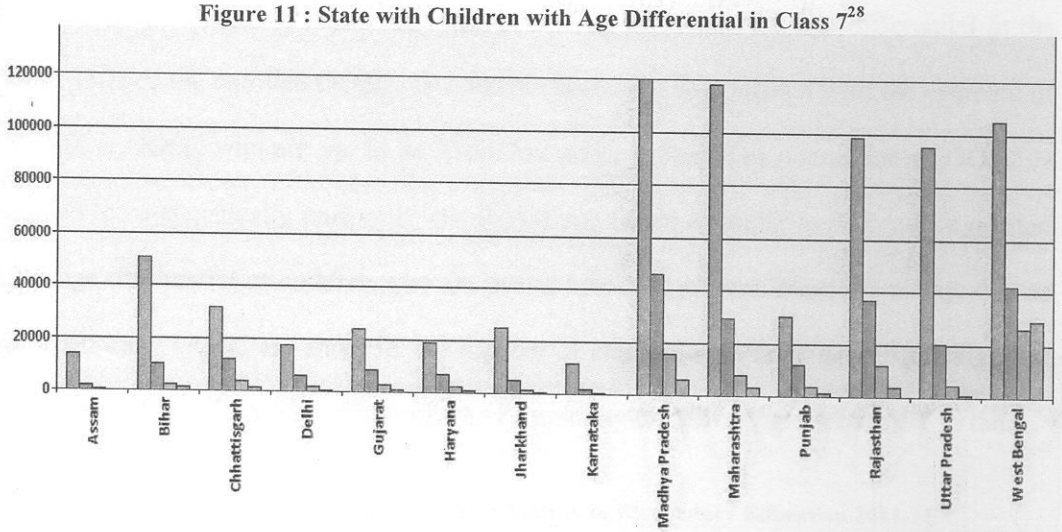


In contrast to class 5 age differential, there are more number of states which have more than 10000 children who are at least 2 yrs overage for class 7(see Figure 11). This

[26] Tabulated by the author from DISE raw data of 2011-12
[27] Tabulated by the author from DISE raw data of 2011-12

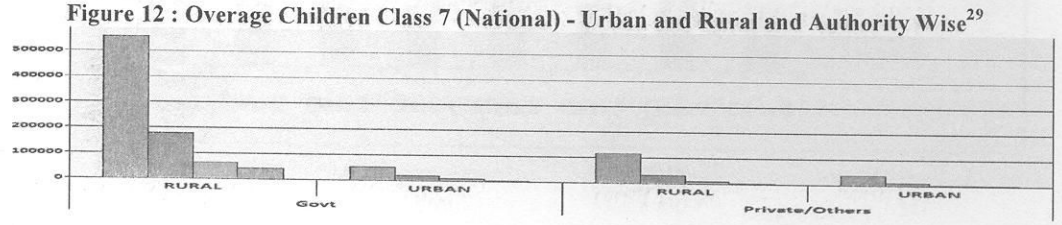
makes it even more difficult for the special training agency/school. It implies that Madhya Pradesh has over 1.2 lakh students who are 2 years overage for class 7 i.e. they are at least 13 years old. In case they undergo a yearlong special training, they would have to achieve the competence for the age appropriate class that is 10th, since by then he/she will be 15 years old. MP also has another 42000 students who are 3 years overage for class 7th. West Bengal surprisingly has over 25000 students in class 7 who are 4 years overage. Mainstreaming them would be an insurmountable challenge.

Figure 11 : State with Children with Age Differential in Class 7[28]



The figures of class 7 of rural -urban areas and those of the government- private managed schools seems to be maintaining the same trends as for class 5(Figure 12). The consistency of the trend between classes 5 and 7 will enable estimating the quantum and complexity of the special training that needs to be planned.

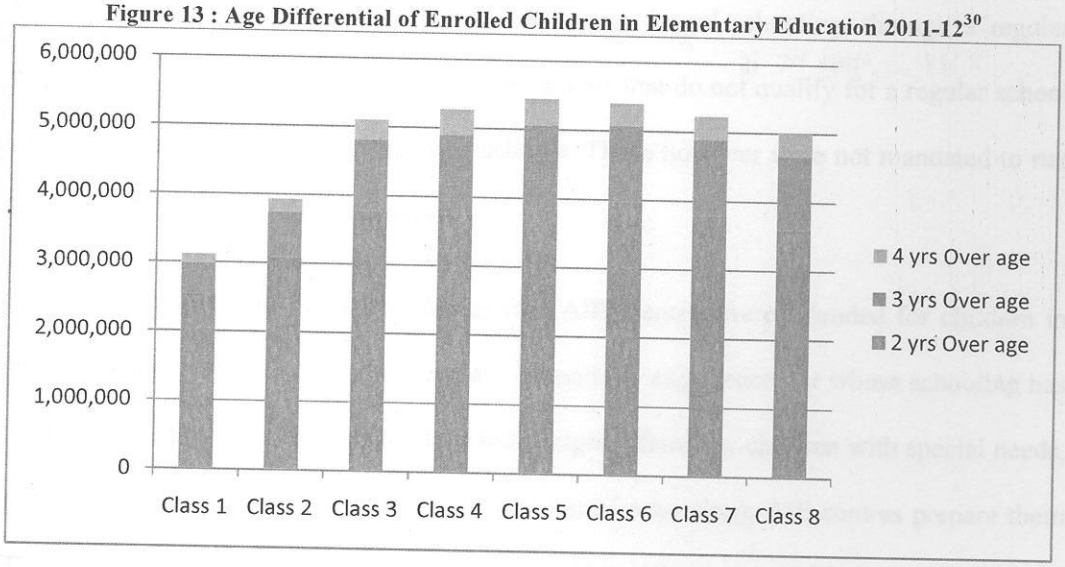
Figure 12 : Overage Children Class 7 (National) - Urban and Rural and Authority Wise[29]



[28] Tabulated by the author from DISE raw data of 2011-12
[29] Tabulated by the author from DISE raw data of 2011-12

Having seen the trends of the age differential under various categories such as geographical, gender and type of school lets us now estimate the overall age differential at the national level as it was in the year 2011-12. The Figure 13 below indicates that of all the children who are overage for their classes (in any school), most are over age by two years. The total number of overage children peaks in classes 4 and 5. Whereas, the fact that most children are only two years overage is comforting, the sizeable number of children being overage in higher classes i.e. class 4 and above, is upsetting. It is evident that the administering of ST will be that much more complex. The age differential in the Figure 13 is of the enrolled OOSC. The figure should not be confused with the estimate of 1.8 million OOSC who are yet to be identified and enrolled. The population of OOSC is assumed to be statistically uniformly distributed and hence a similar trend can be expected in the age differential of children who are out of school at present. Needless to say, that as and when these OOSC are enrolled, the number of children with large age-differential will also increase further, thereby increasing the complexity of delivering effective ST to them.

Figure 13 : Age Differential of Enrolled Children in Elementary Education 2011-12[30]



[30] Tabulated by the author from DISE raw data of 2011-12.

In conclusion it can be said that the age differential between the biological age and the academic age of OOSC, as and when they get enrolled, increases the complexity of the administering of ST further. This aspect needs to be factored in carefully while designing the policy and conduct of ST. To this end, this study proposes to suggest some measures.

Section 3: Analysis of Designing, Conduct and Effectiveness of Special Training to Out of School Children

The education systems are interwoven into manifold layers based on class, caste, gender, and religion. Unequal social, economic and power equations, which persist, deeply influence children's access to education and their participation in the learning process. This is evident in the disparities in education access and attainment between different social and economic groups. All these factors are likely to influence the effectiveness of the special training.

Special Training Initiatives prior to RTE Act

Ever since the launch of SSA in 2001, centres under the Education Guarantee Scheme (EGS) were intended to provide access to formal schooling, through a regular curriculum and textbooks, to children in habitations that do not qualify for a regular school due to existing state norms for opening schools. These however were not mandated to run bridge courses the way the Act proposes.

Alternative and Innovative Education (AIE) centres were intended for children in difficult circumstances, with no regular schooling experience or whose schooling has been disrupted (street children, children from migrant families. children with special needs, children who have never enrolled or dropped out of schooling). AIE centres prepare them to attend formal schools within a short period of 9 months to a year. These centres transact a specially tailored curriculum and pedagogic practices that seek to impart the required age/grade specific knowledge and skills, so that the child is mainstreamed.

Bridge courses and camps have been run by NGOs and governments in the past. Residential bridge courses run by some NGOs such as MV Foundation, Hyderabad have been particularly successful. Government's KGBV scheme for girls, which runs residential and non-residential bridge courses, too have been applauded. So in many ways an attempt to bridge the gap between the academic age and the biological age has been an area of concern for the civil society and the administration alike.

What is Special Training?

Ever since India embraced the universalisation of education in 2001, numerous educational programmes have been launched. Compared to the mammoth elementary education scenario in India, the ST may appear to be a small problem for a small group of children. However, *justiciability* of the RTE act warrants that every child is afforded education. This imposes greater responsibility on the states.

One can view the ST as a school for the school or a school with in the school. ST serves to be a feeder process for mainstreaming of OOSC. The complexity induced into ST due to enormity of the OOSC numbers and the wide age differential has been discussed earlier.

The overall efficacy of mainstreaming primarily depends on - identifying the OOSC, enrolling them and then ensuring their retention in the schools concerned. Since 2001, due to the concerted efforts in identification of OOSC, the OOSC numbers show a declining trend. This is good progress. ST encompasses all a wide range of processes and activities. Retention and completion of the elementary school cycle are also critical areas of concern. It is well recognized that once children are 'mainstreamed' they face a variety of `coping' problems. Some of these are related to curricular issues, others are due to social factors, including various discriminatory practices prevalent within the school system. A

child entering the school has to catch up and then keep pace. The pressure emanating from this situation could lead to generating 'fears' of different kinds that impede learning. (Anil Bordia, 2012)[31]

Anil Bordia Committee report (Anil Bordia, 2012)[32] (on strategies of harmonising RTE with that of the Sarva Shiksha Abhiyan, to achieve operational synergies) and the National Level Workshops on Special Training at New Delhi (National Level Workshops on Special Training held on 20-21st Sep 2010, 2010)[33], have both recommended numerous measure to achieve efficacy in designing and delivery of ST.

Designing special training requires understanding the context and needs, strategies for age-appropriate enrolment, duration of special training and bridging programmes and teachers training. Each of these aspects would now be analysed. Besides these the study will also examine - the school empowerment plan for special training, strengthening of SMC, preparation and keeping of record of children, school readiness packages-developing special training materials, life skill education and finally the management of special training.

Quantum of Schools that conduct ST

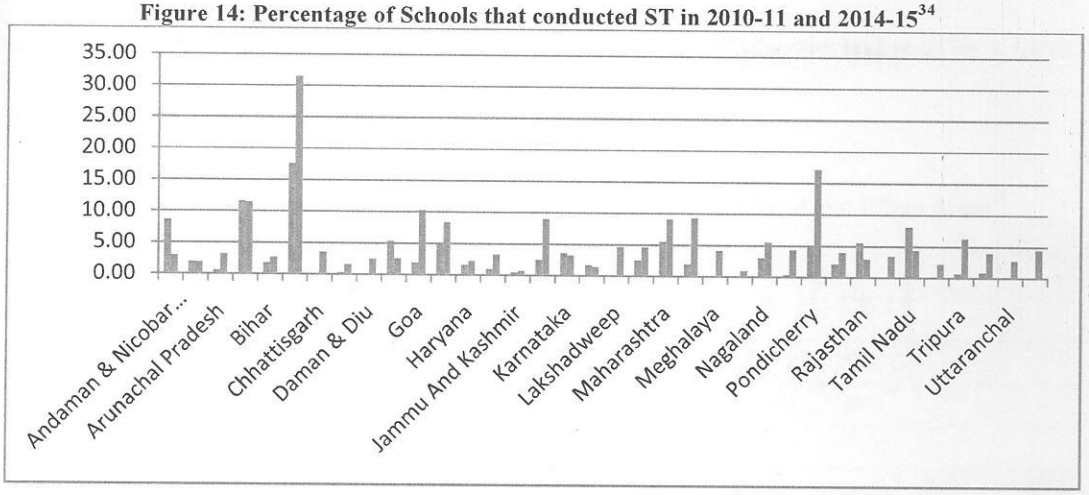
It is important to analyse how the RTE act has percolated down to the lower levels by examining how many school in India commenced ST process in 2010-11 itself, just after a year of the promulgation of the RTE. On analysis of the DISE data, it is seen that only 35100 schools reported conduct of ST in any form by indicating that students were enrolled for ST in the current academic year of the total 11.5 Lakh schools in India then. The state wise distribution of schools that conducted ST is in Figure 14. This shows that urban areas and UTs were more aware of the provision and could commence ST process. It is

[31] Chap III
[32] Chap III
[33] Pp 1

understandable that states having remote and inaccessible areas lagged behind but low percentages of UP and West Bengal are a matter of concern.

The number of school had increased to 14.4 Lakhs in India by 2015 and accordingly an impressive number of approximately 69500 reported that they conducted ST in that year (Figure 14). Over the years the awareness of ST has increased which is evident from the increased percentage of schools in a particular State that reported to have conducted ST in 2014-15 (Figure 14). Somehow, some states have also shown a decline. This could be due the non availability of the OOSC in 2014-15 assuming that the back log of OOSC has been cleared in these intervening years from 2011 to 2015. In Figure 14, for each state, the first set of bars are for 2011 and the second for 2015. States of Andaman & Nicobar, Rajasthan and Tamil Nadu have surprisingly shown a decreasing percentage of school that conducted ST in 2014-15. It needs to be remembered that, due to continued impetus by the government new schools have been opened in all the states.

Figure 14: Percentage of Schools that conducted ST in 2010-11 and 2014-15[34]

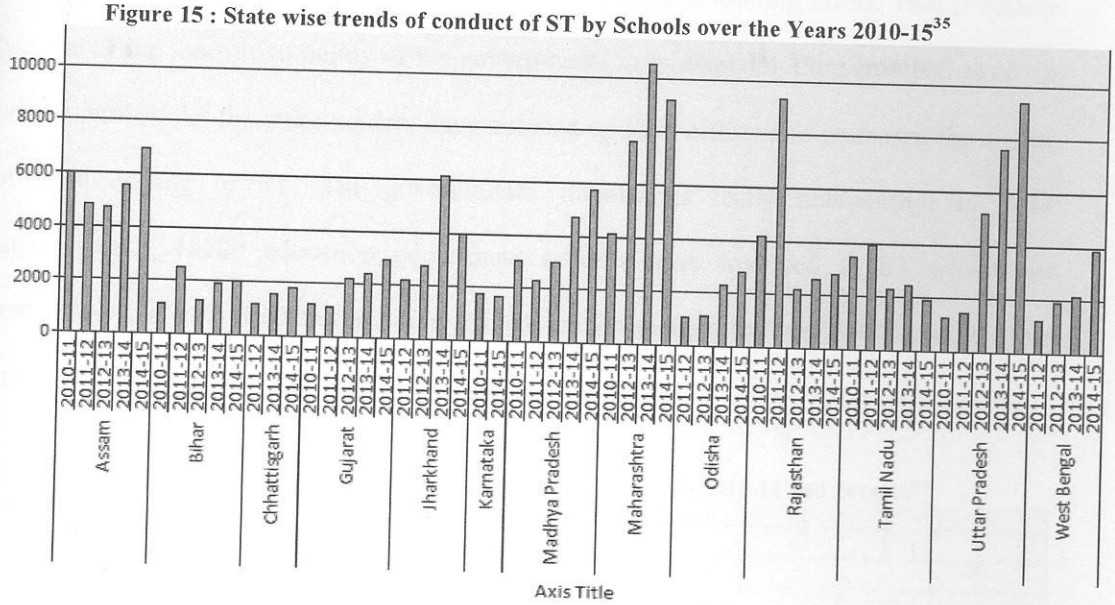


Year after year the number of schools that conducted ST has been increasing which indicates the impetus of the governments and society to the RTE. As seen in Chapter I the number of the OOSC has been decreasing despite the concern that there are drop-outs.

[34] Tabulated by author from DISE raw data 2010 t o2015

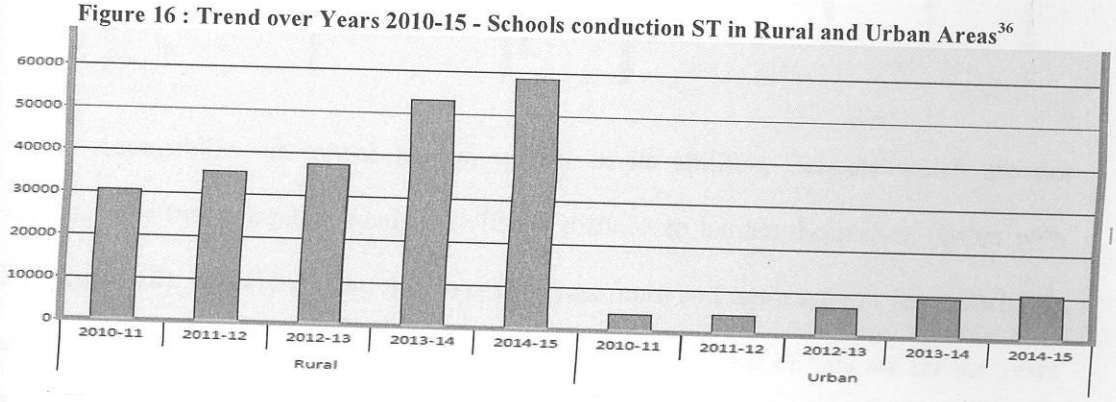
However, the increase in schools that conduct ST, in some form or the other, is a satisfying trend. At the state level (Figure 15) too most states have shown an increasing trend except Jharkhand, Tamil Nadu and to some extent Bihar, which have shown a declining trend.

Figure 15 : State wise trends of conduct of ST by Schools over the Years 2010-15[35]



Rural areas and urban areas alike have continued their impetus towards the delivery of ST (Figure 16). Opening of new schools and imparting ST therein seems to be a focus area.

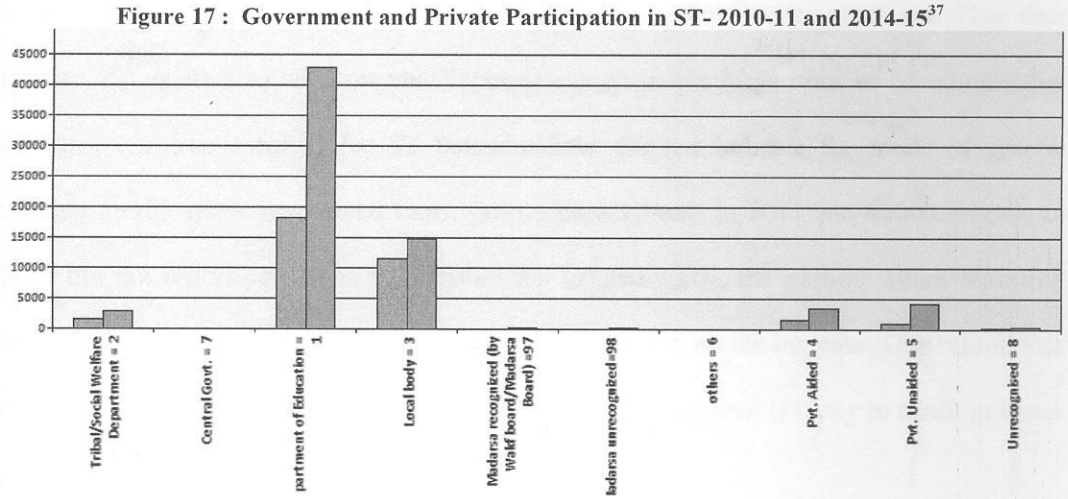
Figure 16 : Trend over Years 2010-15 - Schools conduction ST in Rural and Urban Areas[36]



[35] Tabulated by author from DISE raw data 2010 t o2015
[36] Tabulated by author from DISE raw data 2010 t o2015

Let us now examine how the government and private schools have contributed to the effectiveness of ST. Being the forerunner of any people-oriented policy, the government has indeed fared well (Figure 17). Notably private agencies, both aided by the government and others, have also contributed to the special training effort. This is mainly because of the innovative policy of the governments in maximising the participation of the private parties. All the stake holders have notched up their efforts and increased the degree of administering of ST. The government's impetus is really noteworthy; in 2011 approximately 18200 education department schools were involved in ST which has remarkably increased to 42900 schools. Private parties account for over 7800 schools. Here again the first set of bars are for 2010-11 and the second set for 2014-15, for each category.

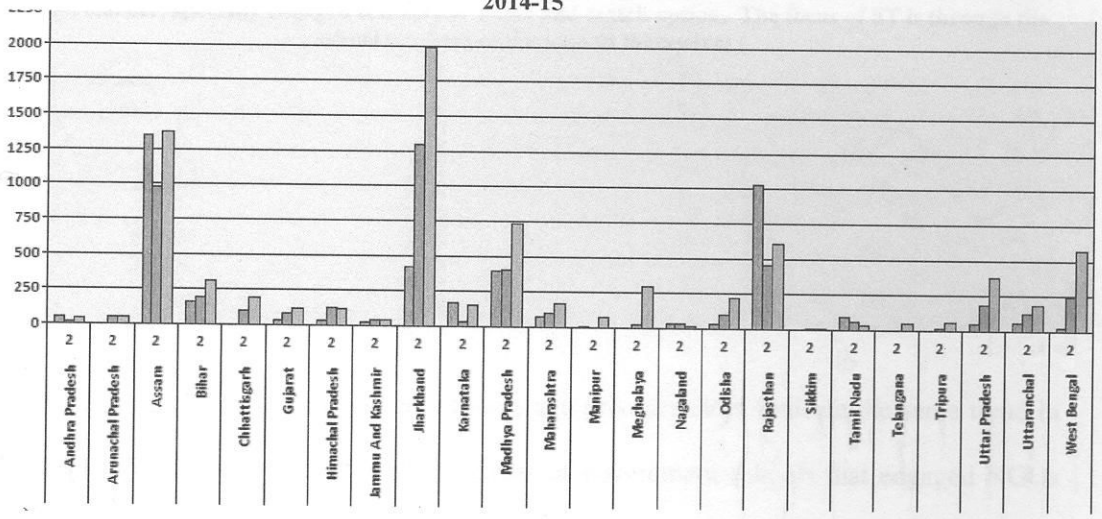
Figure 17 : Government and Private Participation in ST- 2010-11 and 2014-15[37]



Accessibility of school has an impact in its abilities. Schools which are not approachable by all weather roads may find it difficult to burden themselves further with ST (Figure 18). It is comforting that over the years more and more schools in unreachable areas have undertaken ST as in Figure 18. In each state, the set of bars are for the years 2010-11, 2012-13 and 2014-15.

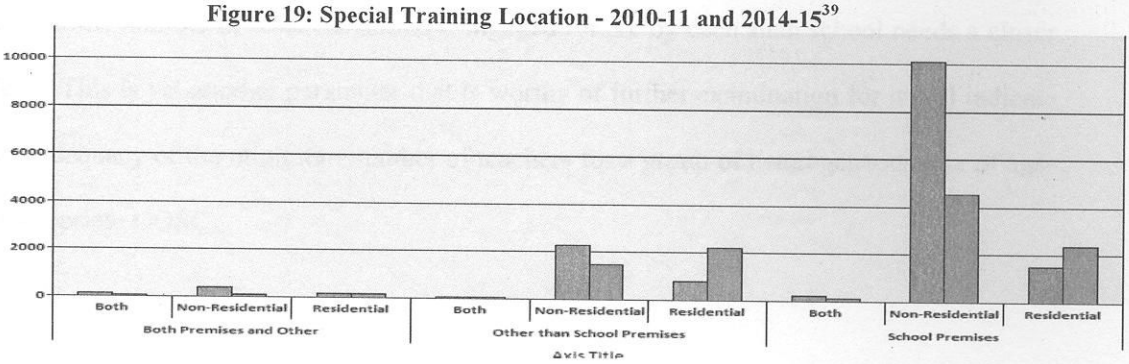
[37] Tabulated by author from DISE raw data 2010 t o2015

Figure 18: Schools not Approachable by all Weather Roads but still impart ST- 2010-11, 2012-13 and 2014-15 [38]



The other mode of special training is residential/non-residential with combination of within school premises and other than school premises implementations. This data (Figure 19) appears to be somewhat inconsistent given the large number of schools that indicated children enrolled for ST but somehow did not indicate the mode of special training on the above mentioned basis. Over 16000 schools in 2011 and 40000 schools in 2015 did not report consistently. Despite the inconsistency, the portion where reporting was accurate shows the trend that residential ST have been on the increase. One reason that can be attributed is that the focussed training in residential school is likely to result in better mainstreaming and reduced drop-outs.

Figure 19: Special Training Location - 2010-11 and 2014-15[39]



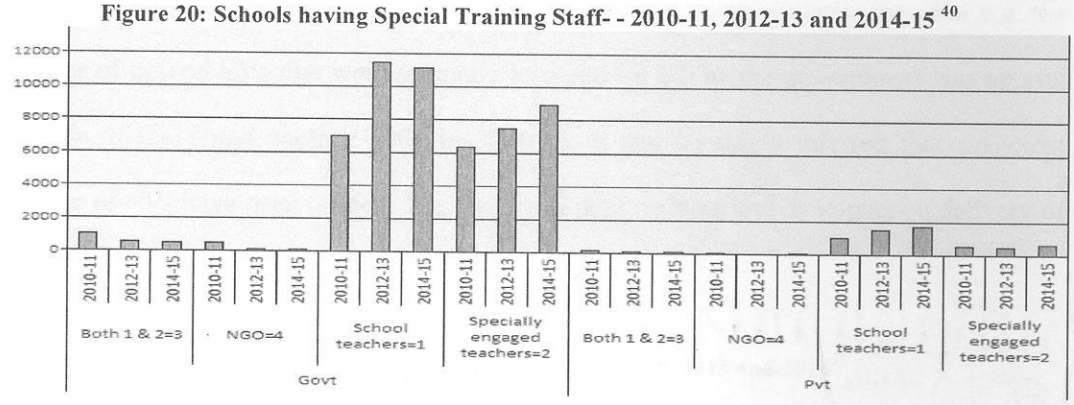
[38] Tabulated by author from DISE raw data 2010 t o2015
[39] Tabulated by author from DISE raw data 2010 t o2015

Who conducts the ST may have some influence on its success. The RTE act provides the flexibility to the local authorities and school management committees (SMC) to decide who conducts the ST, the school teacher, specially engaged teachers or a mix and match option. The focus of ST is through the school teachers of the schools themselves (

Figure 20). Both government schools and private school indicate the same trend in 2010-11 and 2014-15. Notably, the number of government schools that engaged NGOs for imparting special training has decreased from 479 in 2011 to a mere 170 in 2015. This is a surprising trend and needs to be investigated whether the same is because of inefficiency of the NGOs or disenchantment of the previously engaged NGOs. Whatever be the case, reduced participation of the NGOs may commensurately reduce the capacity of the local governments to implement the RTE norms.

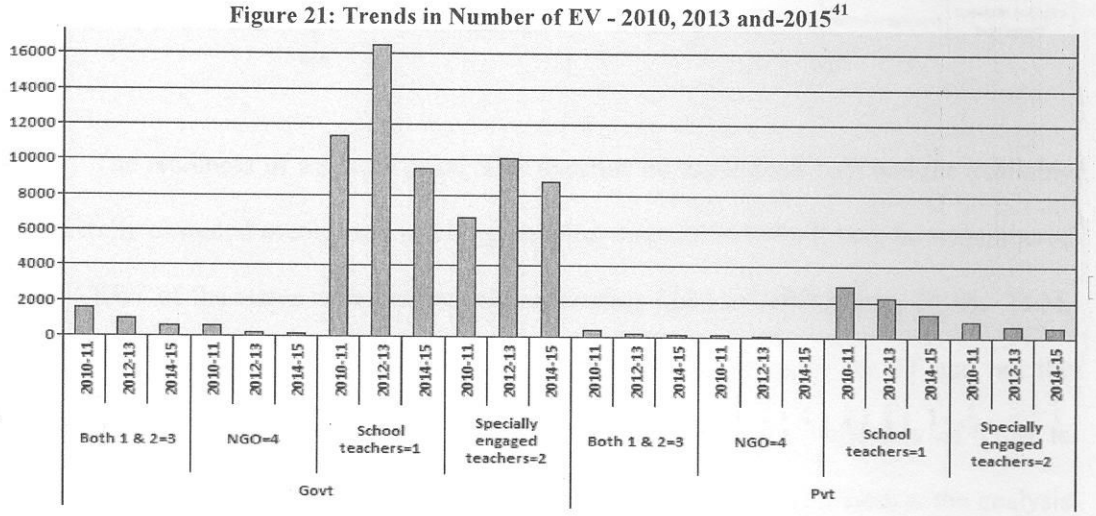
The RTE facilitates the SMC to employ any or many of the available staff- teacher from same school, specially engaged teachers, education volunteers (EV). This study will hence forth use the term EV to represent the said group. It needs to be noted that the number of schools that engaged teachers had initially increased in 2012-13 but decreased subsequently in 2014-15. Even though, the number of schools imparting ST has increased over time, number of teachers/staff/EV engaged for ST by each such school needs a closer look. This is yet another parameter that is worthy of further examination for it will indicate the adequacy of the minimum number of teachers for a group of heterogeneous mix of age-appropriate OOSC.

Figure 20: Schools having Special Training Staff- - 2010-11, 2012-13 and 2014-15 [40]



Even though the number of schools employing various types of EVs has been increasing over the years, the overall number of actual teachers/EVs employed has a different trend (Figure 21). Initially the total number of EVs increased both in government and private bodies till 2012-13; however, thereafter, a notable decrease, dipping to levels lower than that of 2010-11 is seen in 2014-15. Reason for this dip, despite the rising awareness and better enumerating of OOSC, deserves a more rigorous treatment.

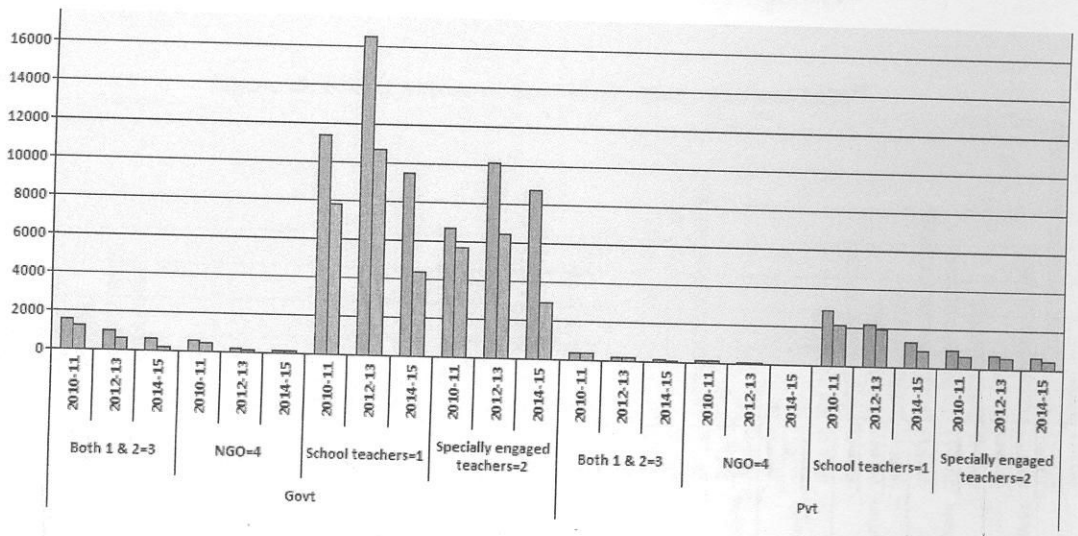
Figure 21: Trends in Number of EV - 2010, 2013 and-2015[41]



[40] Tabulated by author from DISE raw data 2010 t o2015
[41] Tabulated by author from DISE raw data 2010 t o2015

The number of EVs available for ST has been decreasing over the years as shown above. However, the numbers of EVs trained in that calendar year has been substantial (Figure 22). Most of these trained EVs are available for subsequent years too. For e.g. the number of trained EVs that were specially engaged for ST by the government was approx 6900 in 2012-13 and another 2900 in 2014-15. It can be safely inferred that sufficient number of EVs have been trained. The quality of their training and its impact on delivery of the ST is yet another matter.

Figure 22: Trends in Training of EVs - 2010, 2013 and-2015[42]

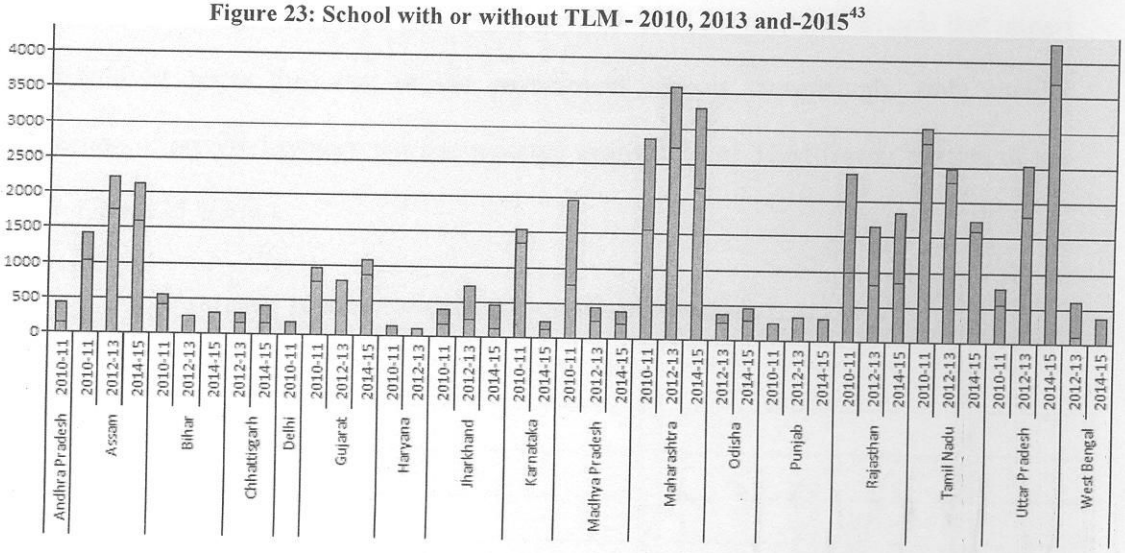


The readiness of a school or an STC depends on the trained staff and the availably of specially designed accelerated teaching-learning material (TLM). It may be remembered that SCERT of the states were responsible to develop TLM (MHRD Rules, 2010). TLM, in this, case should indeed be reckoned as TLM specially designed for ST and not the curricular learning material. In this context, first and foremost is availably of TLM to enable accelerated learning by the OOSC based on their competence. Hence, the analysis will be limited to studying the number of school that have reported availability of TLM. The qualitative attributes of the TLM will be assessed later in the study.

[42] Tabulated by author from DISE raw data 2010 t o2015

We see in the Figure 23 below that only a small number of schools have reported availability of TLM for ST. Maharashtra and Rajasthan have both fared well whereas Tamil Nadu, Karnataka and UP have only a small number of schools with TLM. The efficacy of ST in the absence of adequate TLM is a real suspect. Of course, this inadequacy may have been ameliorated by employing competent teachers to deliver the accelerated learning. The top portion of each bar indicates the schools which reported that TLM was not available in the school. It was expected that more and more schools will have TLM with each passing year cumulatively. That is not the case in Figure 23. Clearly, a lot more needs to be done to make TLM available to all OOSC undergoing ST.

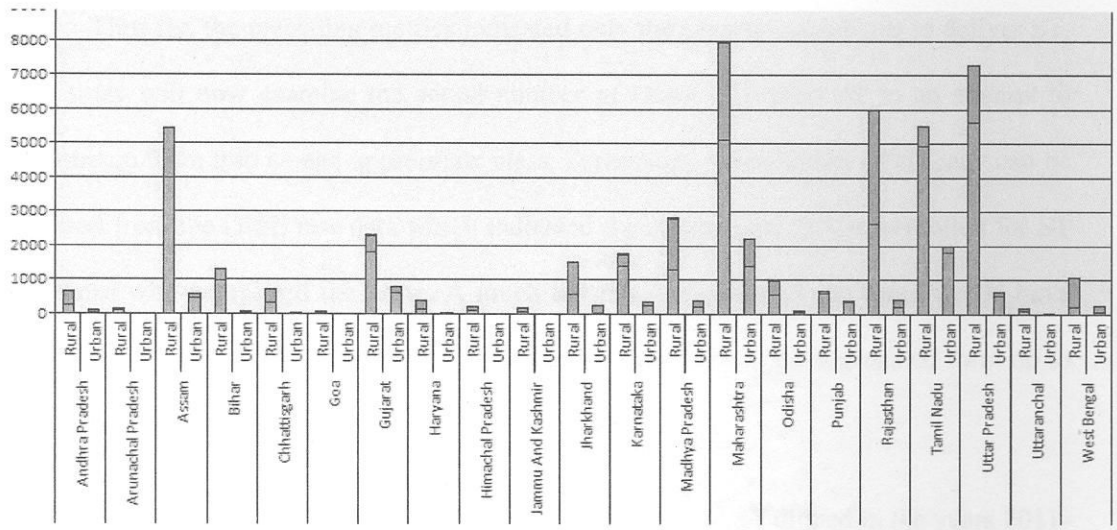
Figure 23: School with or without TLM - 2010, 2013 and-2015[43]



There is no rural-urban divide as far as the non-availably of TLM is concerned (Figure 24). Status of the TLM, in the year 2014-15, as in Figure 24, indicates that both rural and urban areas, suffer the non-availably of TLM in a large proportion of schools that administer ST. The local bodies and the education department could consider this aspect and provide further impetus to liquidate the shortage of TLM.

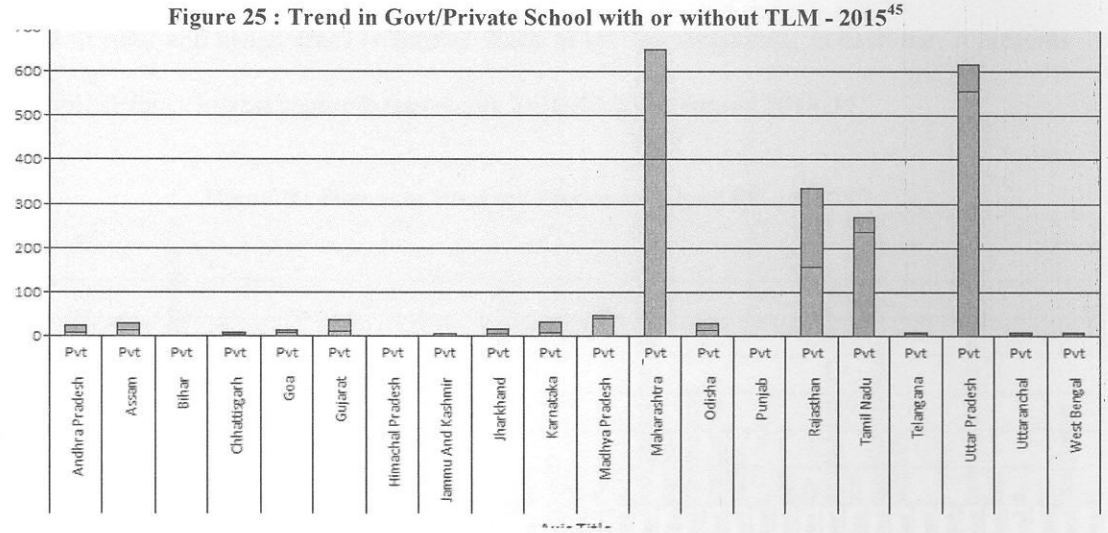
Figure 24: Trend in Rural/Urban School with or without TLM - 2015[44]

[43] Tabulated by author from DISE raw data 2010 t o2015
[44] Tabulated by author from DISE raw data 2010 t o2015



One would have expected that the availability of TLM in private schools that impart ST would be better than that of the government schools. Surprisingly, only smaller proportion of private agencies too has reported availability of TLM (lower portion of the bar in Figure 25 below).

Figure 25 : Trend in Govt/Private School with or without TLM - 2015[45]



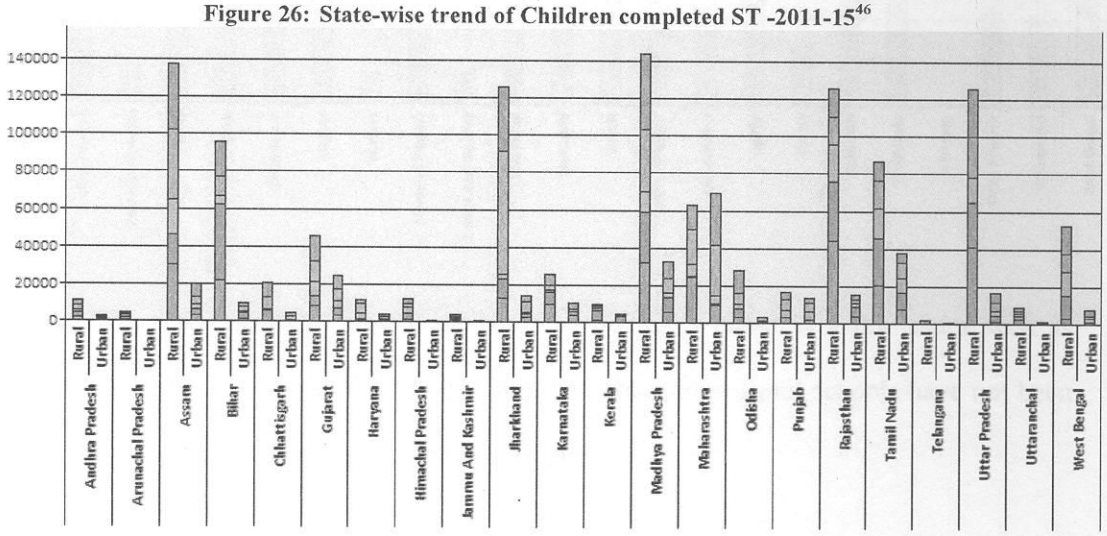
[45] Tabulated by author from DISE raw data 2010 t o2015

Quantum of Children imparted Special Training

Thus far, the preceding metrics indicated only the capacity of schools to deliver ST. This study will now examine the actual number of OOSC provided ST in an attempt to mainstream them into an age-appropriate class. Fortunately, some trends of efficacy can be accessed from the DISE raw data which indicated the numbers of children enrolled for ST and those who completed the same. A much better appreciation of the trend would have been feasible if the school level aggregated data was available in de-aggregated form up to child level. So was not the case in the data from DISE.

We notice that the number of children who completed ST dipped in the years 2011-13 and then picked up in 2013-14 and continued thus (Figure 26). Notably, far greater numbers of enrolled OOSC seem to have completed their ST in 2014-15, two years later. This could be because large number of children were enrolled in years earlier to 2014-15 and went on to complete their ST. This is a positive trend. Not all states are shown in Figure 26; however, the trend remains similar for others too. As was to be expected the trend in rural and urban areas is similar. Each of the five segments, in each bar, represents the time series - lowest segment represents 2010-11 and topmost 2014-15.

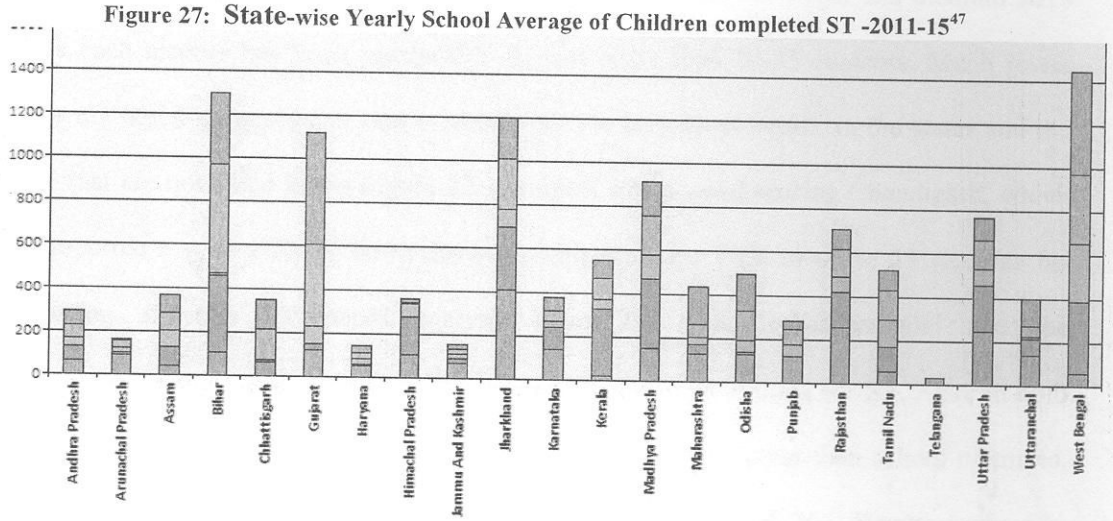
Figure 26: State-wise trend of Children completed ST -2011-15[46]



[46] Tabulated by author from DISE raw data 2010 t o2015

Let us now examine what is the rate of mainstreaming the OOSC by the States over the years. In the Figure 27 below, each of five segments in each bar represents the time series - lowest segment represents 2010-11 and topmost is 2014-15. In certain states the stacked segments becomes taller as we proceed from bottom to top whereas in others the trend is reversed. For e.g. in Bihar, the average number of OOSC completing ST in 2011 was only 50 per school(termed throughput hereafter) which increased to 400 in 2012, and is about 350 in 2015. It needs to be kept in mind that the number of schools conducting ST also had continued to increase over these years. In contrast, Rajasthan has a lower throughput and also has a decreasing trend as we proceed up the bar in the Figure 27. Whether larger throughput of the school, has any effect in the quality of the ST received by the OOSC in that school, could be examined. Rural school have greater throughput as expected and so do the government schools.

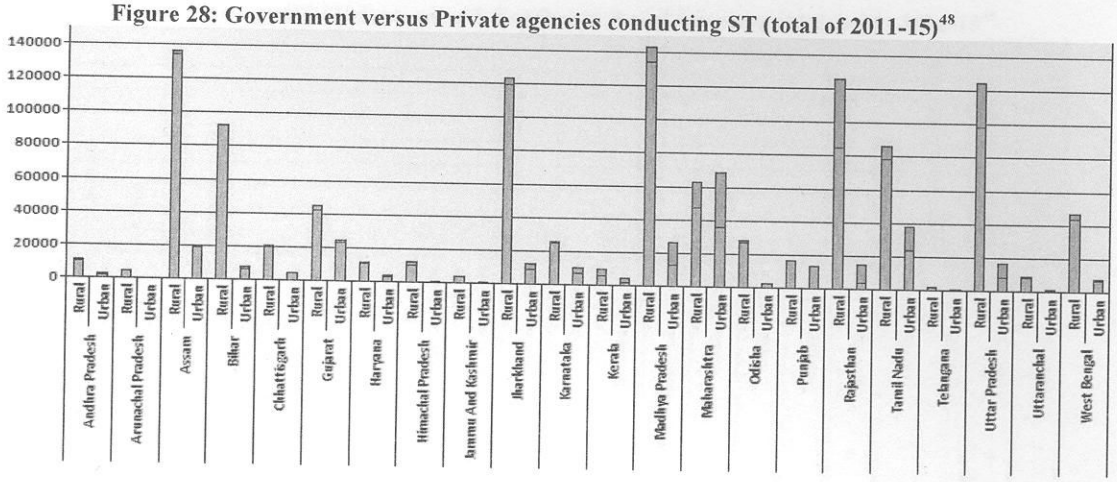
Figure 27: State-wise Yearly School Average of Children completed ST -2011-15[47]



The private schools have contributed considerably albeit in a few states such as Maharashtra, Rajasthan and UP, that too in urban areas only. Rural schools have not been able to leverage private body participation (Figure 28).

[47] Tabulated by author from DISE raw data 2010 t o2015

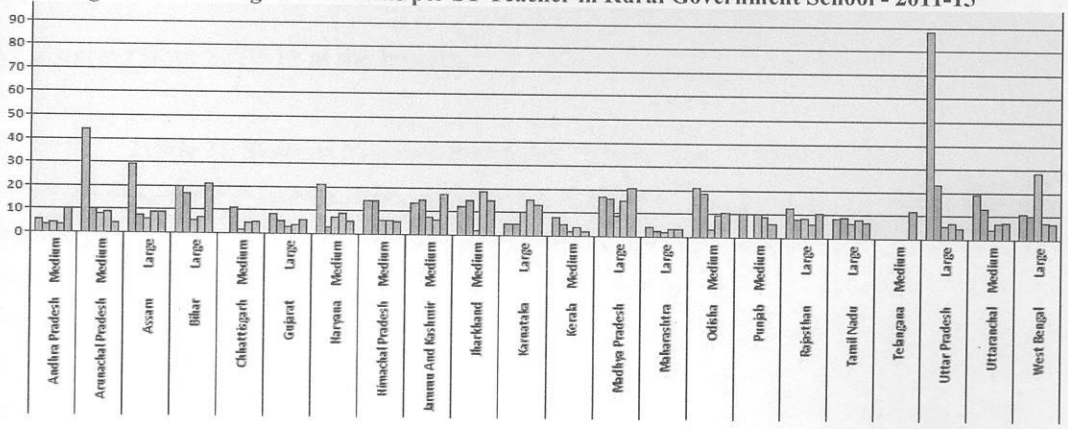
Figure 28: Government versus Private agencies conducting ST (total of 2011-15)[48]



Teachers are one of the most important constituents of ST process. The pupil teacher ratio (PTR) of ST has a lot of bearing in its success. This PTR is the ratio of teacher and education volunteers, either from within the school staff or specially engaged for the ST, and the students trained by them. In Figure 29, if we disregard the three peaks in Arunachal Pradesh, Assam and UP in 2010-11, we notice that in larger and medium sizes states each teacher has been responsible for not more than 20-25 students. Much lower ratios are noted in most other cases, which seem to be a good trend. In the states and the UTs, that are not listed in the Figure 27, the ratios are as good sparing Chandigarh, which has reported a poor PTR of 50 in 2014-15. Impact of the PTR of up to 25 students for imparting effective ST needs analysis given the wide age-differential and the heterogeneous mix of the OOSC each teacher is likely to be allotted for ST. Also, in both cases where ST was conducted within school premises and in other than school premises, the PTR has mostly around 10-15 which is better than PTR of 25. However, there is remarkable increase in PTR where teachers were specially engaged for ST in the past years compared to schools which did not specially engage teachers for ST. The trend has since been corrected in 2014-15 save Chandigarh which reports a high PTR of 60 students to one ST teacher/EV.

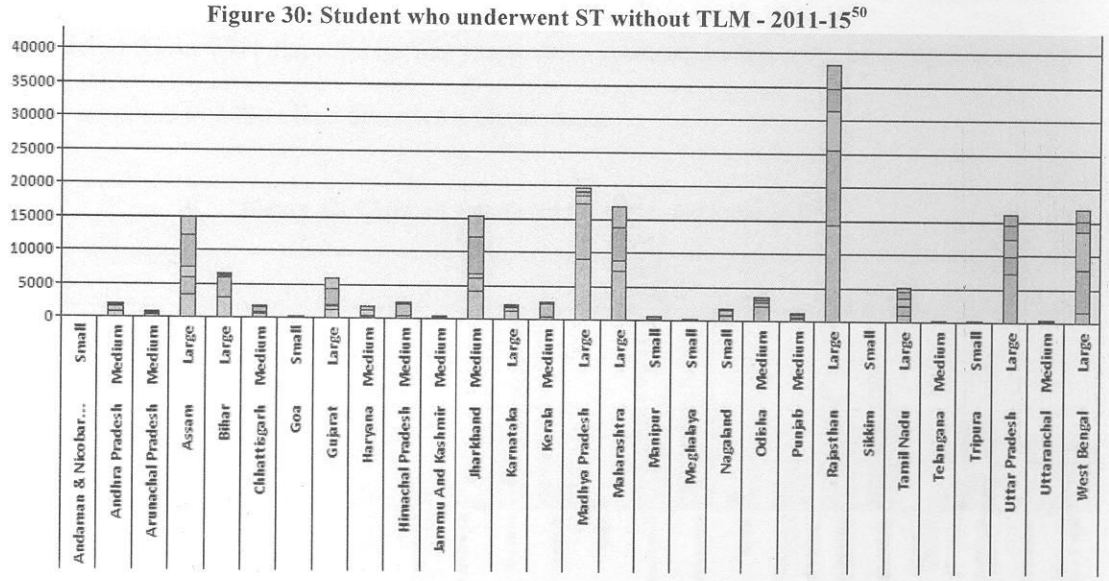
[48] Tabulated by author from DISE raw data 2010 t o2015

Figure 29 : Average ST Students per ST Teacher in Rural Government School - 2011-15[49]



Availability of ST material may impact effective administering of the training. Considerable numbers of students had to do with no TLM as reported by the schools. The good part is that the trend (Figure 30) has been decreasing over the years, and by 2014-15, as represented by the thinning of the top most segments on each bar.

Figure 30: Student who underwent ST without TLM - 2011-15[50]

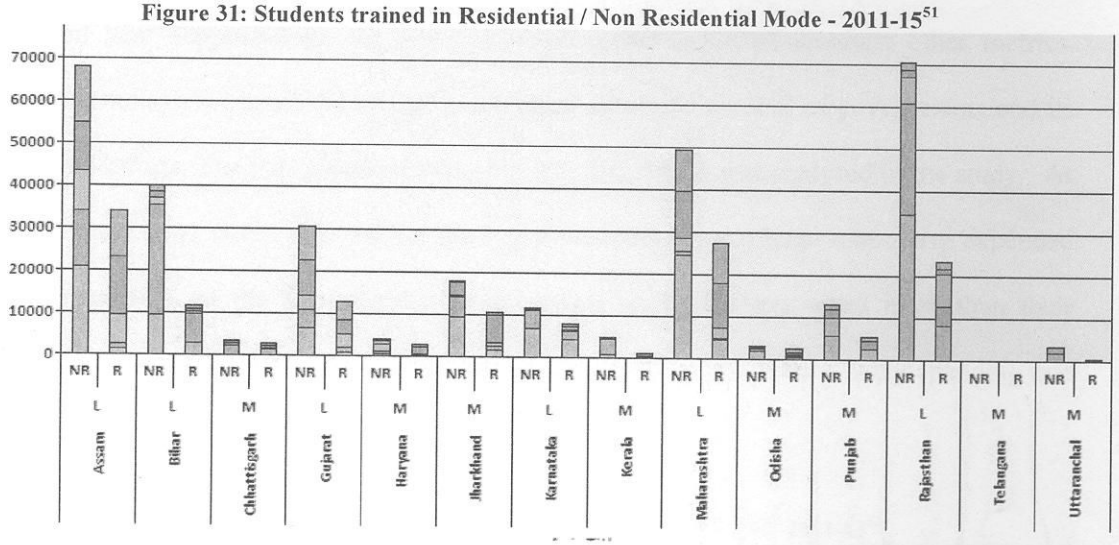


More OOSC were trained in non-residential mode in almost all states (Figure 31). However, Assam, Gujarat and Maharashtra continue to favour the residential ST mode. In smaller states too, that have not been listed in Figure 31, the trend remains same. Each bar

[49] Tabulated by author from DISE raw data 2010 t o2015
[50] Tabulated by author from DISE raw data 2010 t o2015

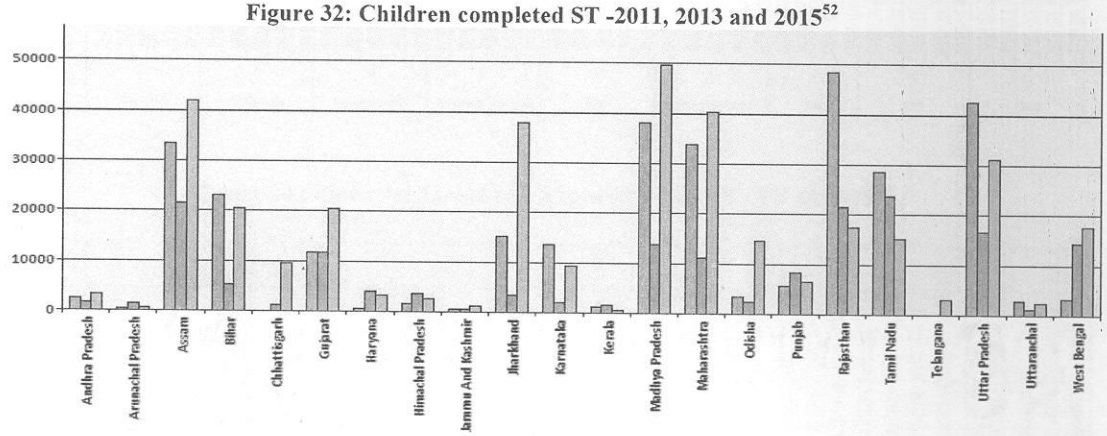
represents the total number of OOSC trained in that state with each segment representing a year staring from 2010-11 at the bottom.

Figure 31: Students trained in Residential / Non Residential Mode - 2011-15[51]



Finally, a quick view (Figure 32) indicated that more number of students have completed ST in 2015 than the earlier years. Also most states have shown a significant dip in the numbers in 2013. This deserves a closer look.

Figure 32: Children completed ST -2011, 2013 and 2015[52]



[51] Tabulated by author from DISE raw data 2010 t o2015
[52] Tabulated by author from DISE raw data 2010 t o2015

Financial Aspects of Special Training

Proposals are made by all the States in the SSA's annual Planning and Budgeting Meetings (PAB). Each state proposes the target figure of OOSC to be provided ST in the current year supported by the previous year's target achieved amongst other metrics. Special outlays are made for this purpose which indicates the will of governments and its focused efforts. The data obtained from the SSA HQ, Delhi was analysed in the study. As in so many other cases, here too the lower governments in most large states have expended less than 60% of the allocations, though Assam seems to have spent more than their allocation in 2014-15 (Figure 33). In contract, the smaller states have a better spending rate as is apparent in Figure 34.

Figure 33: Financial Target and Expenditure on ST - FY 2011-15[53]

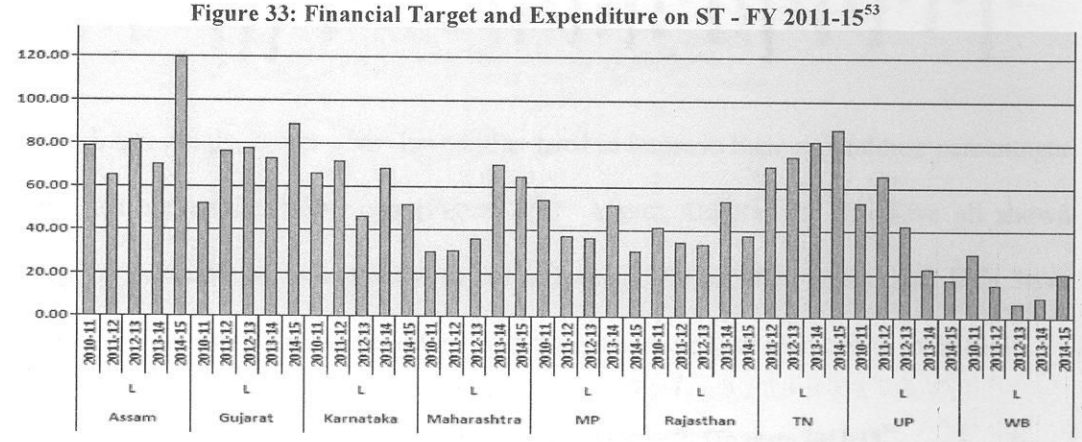
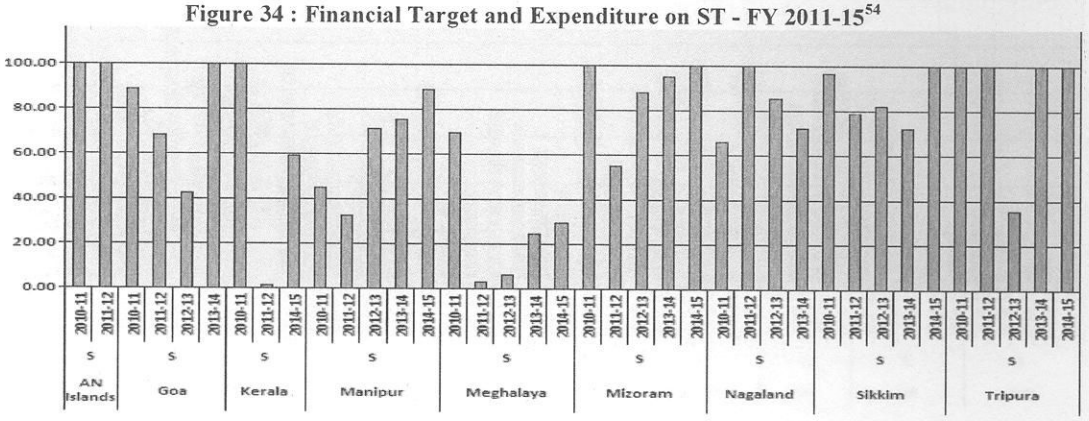


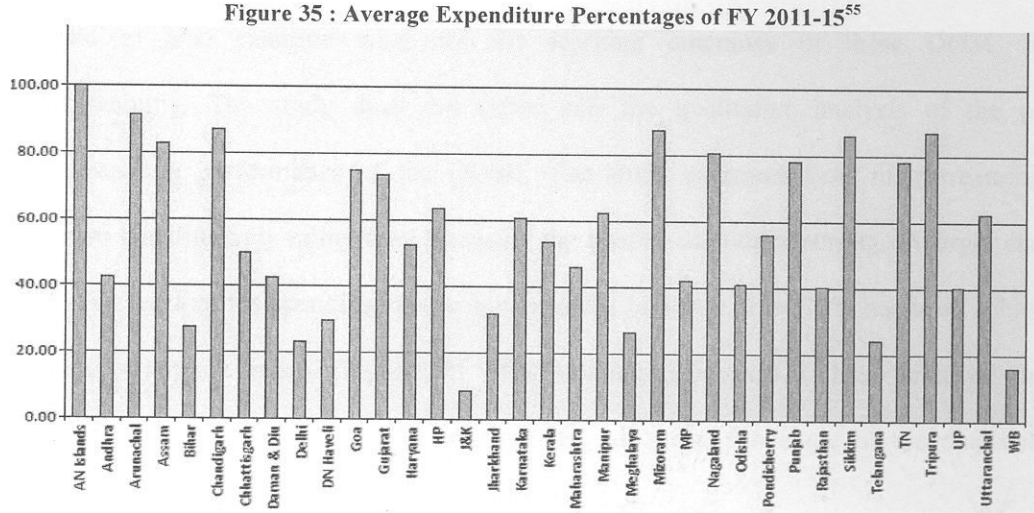
Figure 34 : Financial Target and Expenditure on ST - FY 2011-15[54]



[53] Tabulated by author from SSA HQ data 2010 t o2015
[54] Tabulated by author from SSA HQ data 2010 t o2015

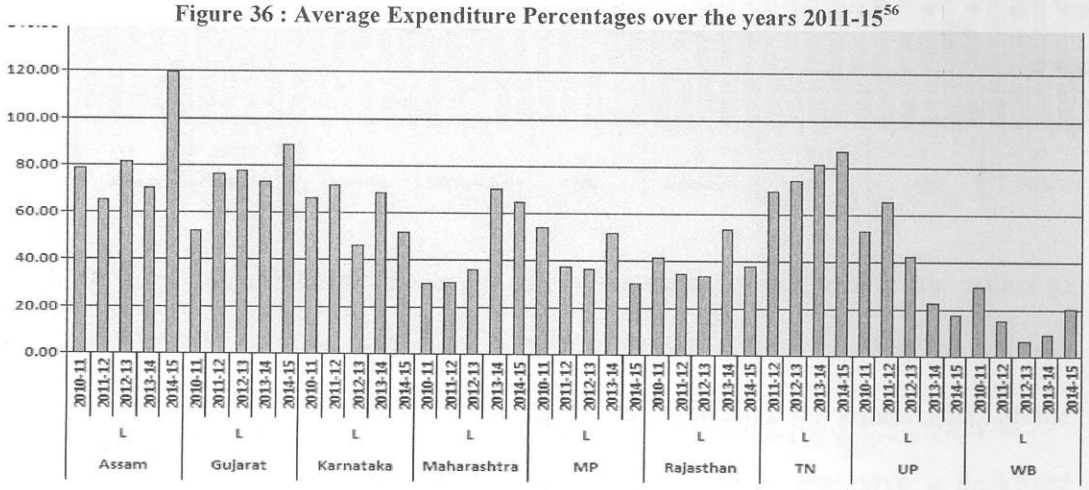
The average spending percentages in the last five years from 2011-15 by all the states is listed below (Figure 35). Overall the fiscal performance of most States in the ST allocation has been low.

Figure 35 : Average Expenditure Percentages of FY 2011-15[55]



Interestingly, larger states have either tried to improve their expenditure percentages or at least maintained status quo (Figure 36). Assam, Gujarat and TN have all shown improved expenditure consistently to 80% levels. The smaller states and UTs have consistently increased their expenditure percentages and are well above 80% in 2014-15.

Figure 36 : Average Expenditure Percentages over the years 2011-15[56]

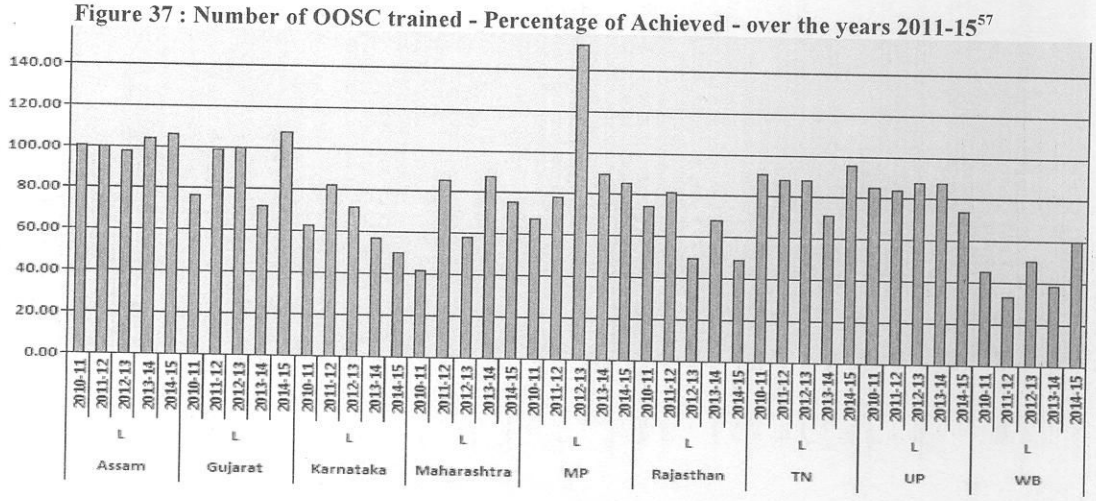


[55] Tabulated by author from SSA HQ data 2010 t o2015
[56] Tabulated by author from SSA HQ data 2010 t o2015

Mainstreaming of OOSC

The proof of the pudding is in its eating. Thus far, numerous aspects and factors that impact ST have been considered in the study. We now examine how these aspects have resulted in actual mainstreaming of the OOSC into an age appropriate class. It would be prudent to also examine what are the learning outcomes of these OOSC after mainstreaming. The study does not delve into the qualitative analysis of the post-mainstreaming performance of the OOSC. The study examines how mainstreaming is effective quantitatively rather than assessing the quality of mainstreaming. In larger states, we have seen that the spending was as low as 60%, however, over 75% has been achieved in terms of student trained (Figure 37). The smaller states and UTs have achieved closer to 100% target. Hence, it can be inferred that adequate funds are at the disposal of respective governments to enable maximise ST in their states.

Figure 37 : Number of OOSC trained - Percentage of Achieved - over the years 2011-15[57]

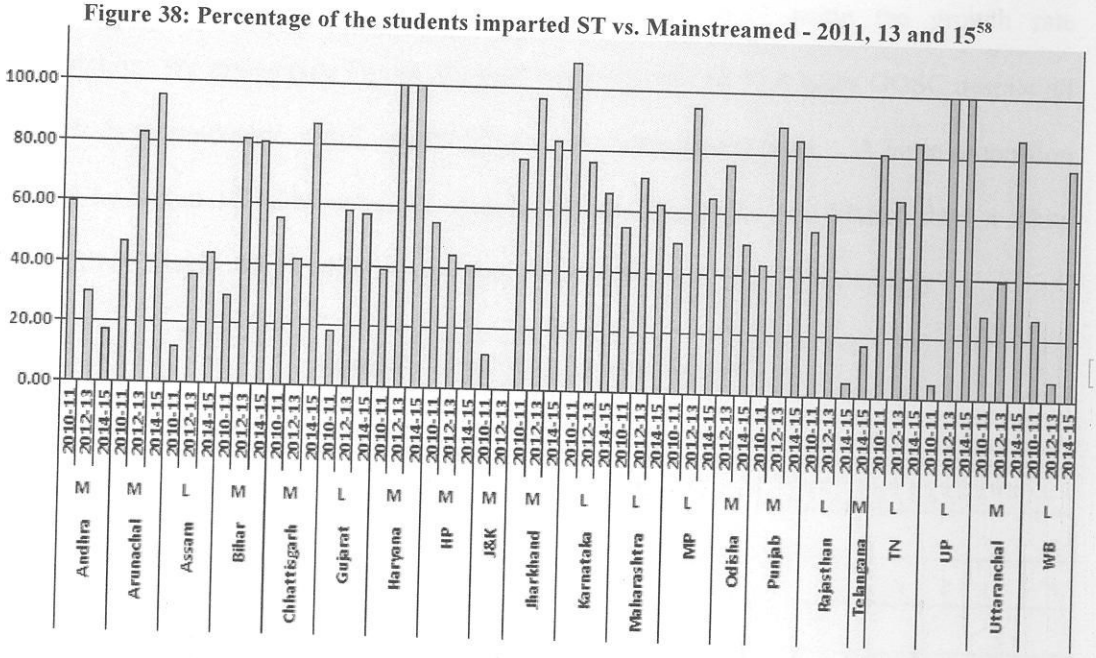


It is not clear whether the target set by the states were closer to the estimated numbers of OOSC, between 6-14 years, in their states or it is fixed based on the assessed maximum capacity to deliver ST. Moreover, as the estimation and enumeration of the OOSC is in itself, an ongoing process, the analysis will at best give a backward

[57] Tabulated by author from SSA HQ data 2010 t o2015

connectivity to the aspect of identifying/enrolling OOSC and not a direct efficacy of ST system. As we have seen Figure 37, there is shortfall in target fixation which gets compounded in the numbers that were imparted ST and further compounded in the numbers that finally were mainstreamed. This is a direct measure of the efficacy of the ST provided the numbers does not include those who dropped out after ST. We find that the shortfall is considerable and is worthy of further rigorous treatment. In case of larger and medium states, the percentage of the ST students that were mainstreamed is not so encouraging in the Figure 38 below, though the trend has been improving with time. Smaller states and UT are faring better in this regard.

Figure 38: Percentage of the students imparted ST vs. Mainstreamed - 2011, 13 and 15[58]



Hence, finally we now examine the numbers of OOSC that actually got mainstreamed[59] which may be reckoned as a good test of the effectiveness of the system. As discussed earlier, mainstreaming of OOSC involves - estimation of numbers, identification of OOSC, enrolment, target for ST, deliver ST and finally mainstreaming.

[58] Tabulated by author from SSA HQ data 2010 t o2015
[59] As reported by the states SSA Offices to SSA HQ, Delhi

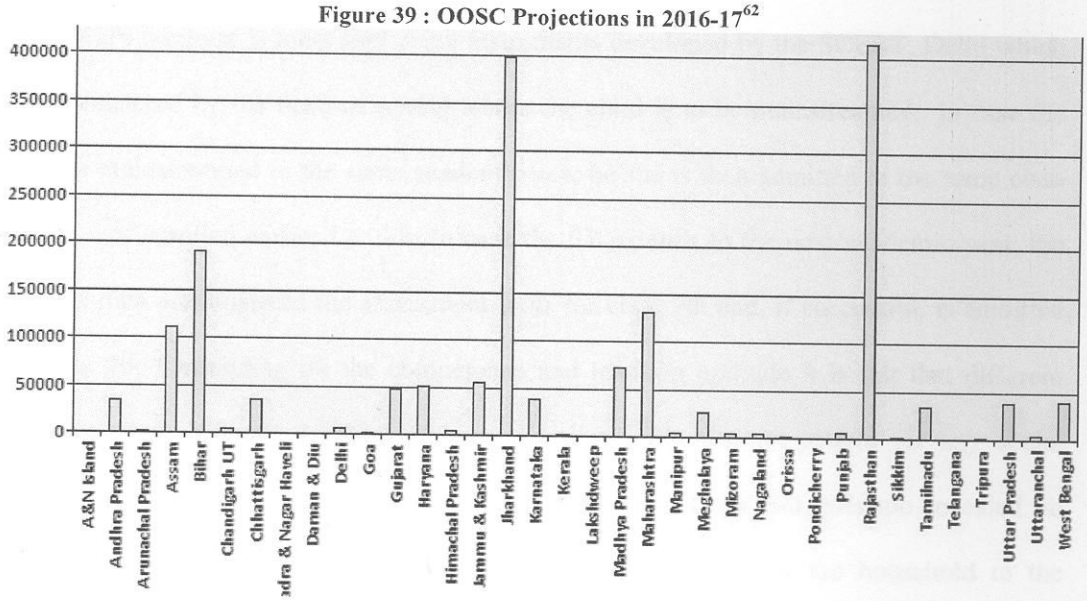
Slippages at each level are to be expected. The numbers of identified OOSC peaked in 2011-12, presumably as result of increased awareness and intensive enumeration efforts thereof and also due to percolation of the RTE act. A quick relook at the rate at which we as a nation are mainstreaming OOSC reveals that OOSC numbers[60] have been reducing consistently with each passing year (see Table 6):-

Table 6 : OOSC in India till 2016 and Projections of 2016-17[61]

27.2 lakhs	32.1 lakhs	29.3 lakhs	22.2 lakhs	17.2 lakhs	18.5 lakhs	15.8 lakhs
2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17

The above trend has been extrapolated to 2016-17 using the growth rate formulation. We notice (see Figure 39) that there will still be 15.8 lakhs OOSC despite all out efforts to enumerate, enrol, impart ST and then mainstream them. . A large proportion of this i.e. about 10 lakhs would be distributed as - Jharkhand and Maharashtra 4 lakhs each, Bihar 2 lakhs followed by Assam and Maharashtra each with 1 lakh OOSC.

Figure 39 : OOSC Projections in 2016-17[62]



[60] Tabulated by author from SSA HQ data 2010 t o2015
[61] Estimated by author from SSA HQ data of 2010-16
[62] Estimated by author from SSA HQ data of 2010-16

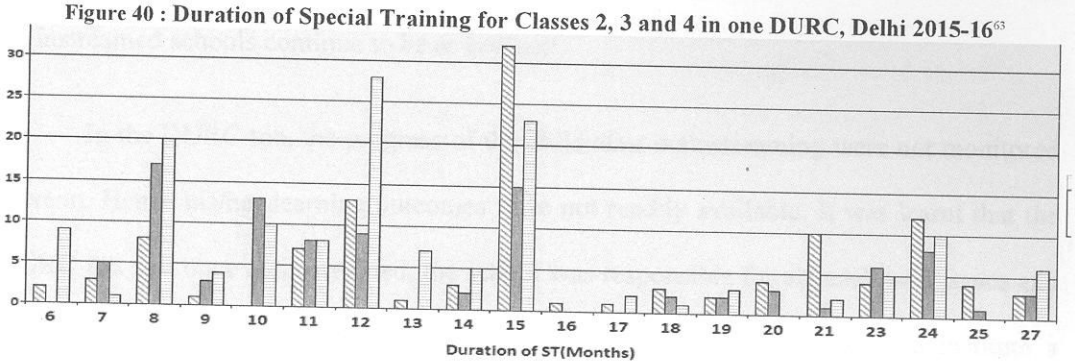
Analysis of Child Level Data from Special Training Centre in Delhi

Special Training Centre (STC) is a generic name for a site that conducts special training of OOSC. The STC may be in the school or in separate premises. It may be residential or non-residential. In Delhi, ST are being implemented and monitored in schools through 22 District Urban Resource Centres (DURC) and 136 Cluster Resource Centres in collaboration with the educational supervisors of the Directorate of Education, Municipal Corporation of Delhi (MCD), New Delhi Municipal Corporation (NDMC) and Delhi Cantonment Board (DCB). The UEE Mission engages qualified and experienced persons with proven merit and willingness to work with dedication to achieve the goals and objectives of SSA, purely on contract basis (UEE Delhi, 2010). The DURC obtains data from the school concerned and forwards to the MIS of the SSA , DOE, Delhi. It emerged that STCs have been maintaining child level data mainly to aggregate the same at the school level, district level and further on. Data of one DURC in Delhi is analysed below.

An interaction with the ground level staff revealed that on identification the OOSC is enrolled into an age appropriate class, say 6th but joins the STC instead of the school. The child's progress is measured using instruments developed by the SCERT, Delhi which is administered by the head of school where the child is to be mainstreamed.. In case the child is mainstreamed in the same academic year he/she is then admitted to the same class he/she was enrolled earlier i.e. 6th. In case the ST extends to the next academic year, the child is then administered the assessment tools for class 7th and, if successful, is admitted to class 7th. Depending on the competence and learning aptitude it is felt that different children need different duration of special training. No distinct pattern for any social category under study was noted i.e. general or Muslim. Boys and girls too revealed no distinct trend. The linkages the socio-economic background of the household to the duration of ST is an area of further research.

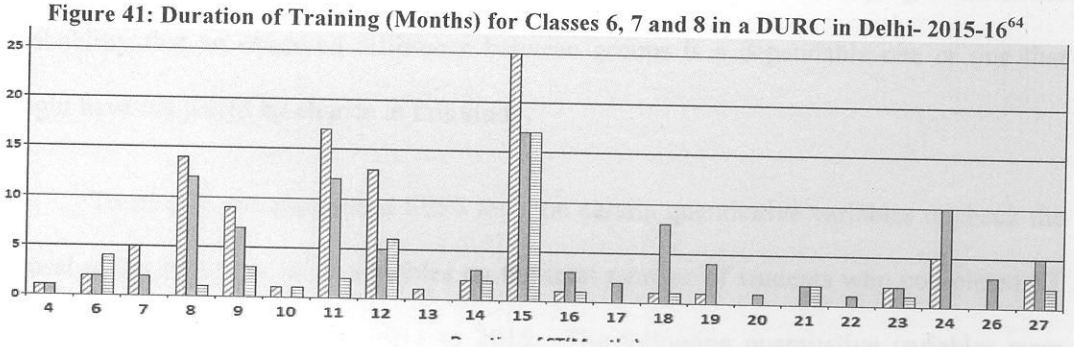
We notice (see Figure 40) that the duration of special training for various classes has no defined pattern. Most students were able to mainstream into classes 2, 3 and 4 with less than 15 months of ST and in that mostly within 12 months i.e. within the same year they were enrolled in the STC.

Figure 40 : Duration of Special Training for Classes 2, 3 and 4 in one DURC, Delhi 2015-16[63]



Similarly, in the Figure 41 below, we note that most students took less than 12 months to be mainstreamed to class 6 (hashed bar), class 7 (bold bar) and class 8 (third bar). This implies that most students are able to mainstream in the same year they enrolled not only in lower classes such as class 5 and below, but even in higher classes like class 6, 7and 8. This finding needs further verification. Considerable number of children took merely 15 months to mainstream.

Figure 41: Duration of Training (Months) for Classes 6, 7 and 8 in a DURC in Delhi- 2015-16[64]



[63] Tabulated by author from DURC, Delhi data 2015-16
[64] Tabulated by author from DURC, Delhi data 2015-16

It is indeed surprising that some children, who were never enrolled earlier, were mainstreamed to class 6, 7 and 8 with mere 6-8 months of ST. This may tend one to believe that some of the OOSC did possess extraordinary aptitude for accelerated learning and may be considered as genius in their own accord. This national asset needs to be nurtured. But again all this can be deemed effective only when the learning outcomes of the OOSC in the mainstreamed schools continue to be as brilliant.

In the DURC too, the progress of the child after mainstreaming were not monitored thereon. Hence his/her learning outcomes were not readily available. It was learnt that the DURC felt that once mainstreamed, the school was responsible for all scholastic issues and not the STC. There appears to be data gap in the MIS and policy gap to institute a mechanism to assess the efficacy of STC per se.

Statistical Analysis

Descriptive statistics has been extensively utilised in the preceding part of the study to analyse trends and to arrive at explicit interdependence of various parameters on the effectiveness of the ST. Statistical inference makes propositions about a population, using data drawn from the population. With inferential statistics, the study tries to reach conclusions that extend beyond the immediate data alone and to make judgments of the probability that an observed difference between groups is a dependable one or one that might have happened by chance in this study.

To do this, the study used SPSS tools on certain quantitative variables to check the causal effect of one or more variables on the total number of students who completed ST over the past five years from 2011 to 2015. The following quantitative variables were selected:-

a. Number of children enrolled with need of ST.

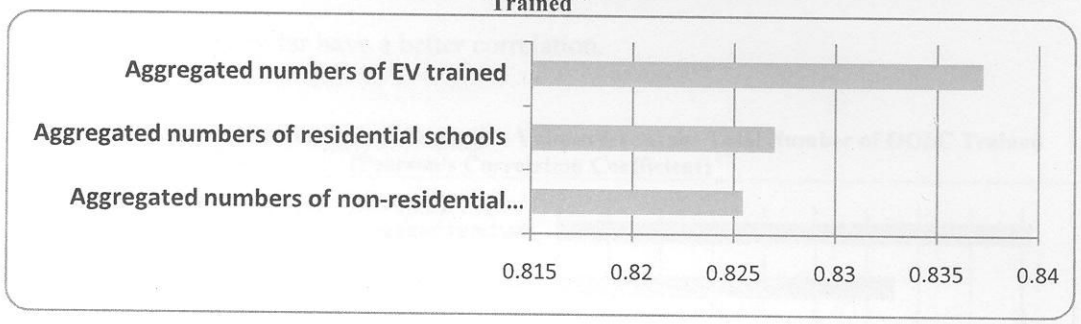
b. Number of children completed ST.
c. No school teachers, specially engaged teachers or NGO in the school.
d. Number of schools that conduct ST within school premises or in other than school premises.
e. No of schools that conduct ST in residential mode or non-residential mode.
f. Number of teacher(s)/education volunteers available for conducting special training.
g. Number of teacher(s) received training for conducting special training.
h. Number of schools which have special training material available.
i. Number of schools in rural area/urban area.
j. Number of schools managed by government bodies and private bodies.
k. Number of schools approachable by all weather roads.

Correlation test was run on several of these parameters to assess the correlation coefficients and the significance levels. The yearly data of 14.4 lakh schools, for the period 2011-15, were aggregated to state level, school type wise, residential / non-residential wise and so on. The data was aggregated using one or more of the above listed variables for e.g. Serial 1 in the table below was arrived at by aggregating the total number of students who completed ST for years from 2010-11 to 2014-15(dependant variable) versus total number of the schools which reported delivering ST in non-residential mode grouped together state-wise, rural/urban wise, school teacher type wise, government/private body managed etc. Pearson correlation coefficients were then calculated for each of the said aggregated values using 2-tailed test of significance using SPSS. Bar charts from the test results were grouped under two aggregated heads as under:-

a. Figure : Aggregated Number of Schools and Other Variables.
b. Figure : Aggregated Number of Education Volunteers.

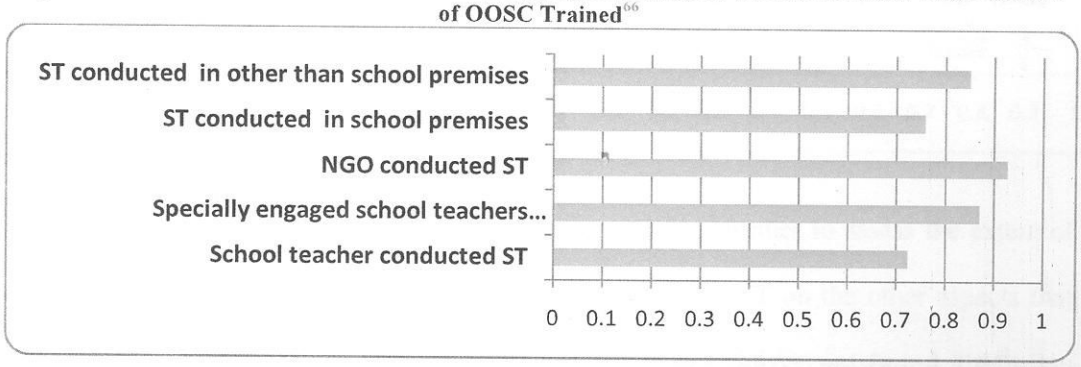
It is seen in the Figure 42 below that there is no much difference in the value of the coefficient whether ST is conducted in residential mode or non-residential mode. However the number of trained EVs has a better correlation.

Figure 42: Pearson's Correlation Coefficient of Aggregated Variables versus Total Number of OOSC Trained[65]



We see in Figure 43 that ST conducts in other than school premises correlated better than when conducted in school premises. Best correlation is when NGOs conduct ST followed by specially engaged teachers and least correlation is seen when school teachers conduct ST.

Figure 43: Pearson's Correlation Coefficient of Aggregated Numbers of Schools versus Total Number of OOSC Trained[66]

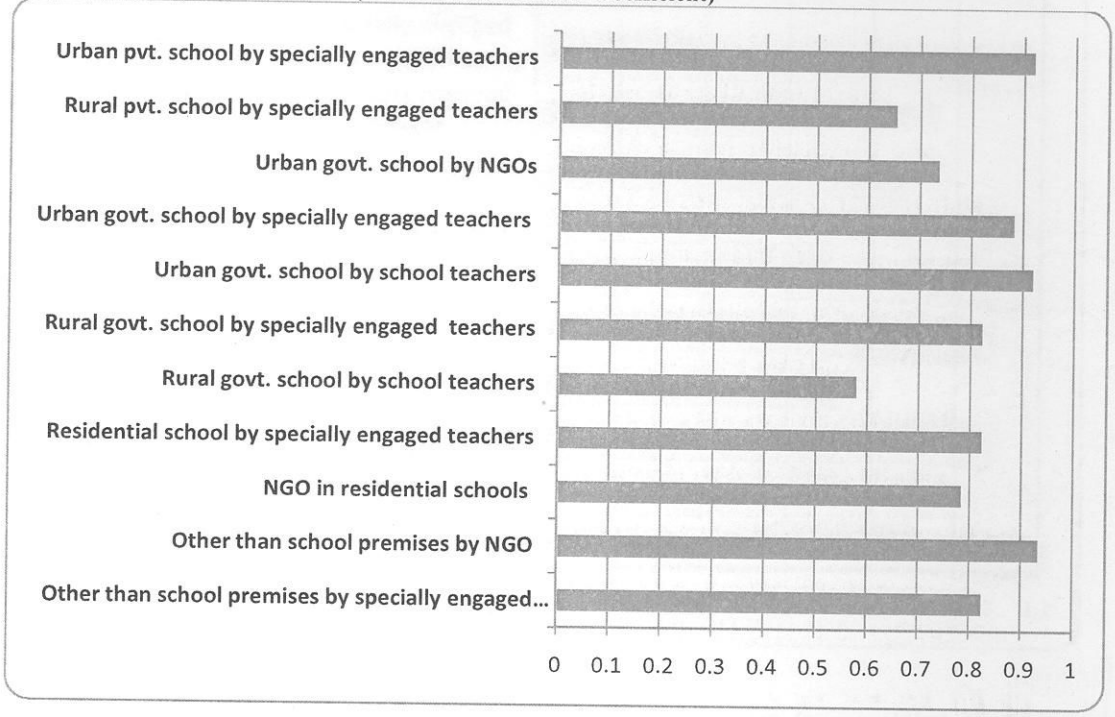


In Figure 44, we aggregate the total number of EVs available in the school that conducts ST. In such private schools, ST conducted by specially engaged teacher shows better correlation in urban areas than rural areas. However, in urban government school teachers have a better correlation than specially engaged teachers and NGOs. But in rural government schools specially engaged teachers have a better correlation. NGOs when

[65] Tabulated by the author from DISE raw data.
[66] Tabulated by the author from DISE raw data.

delivering ST in other than school premises have a better correlation coefficient. Residential schools by far have a better correlation.

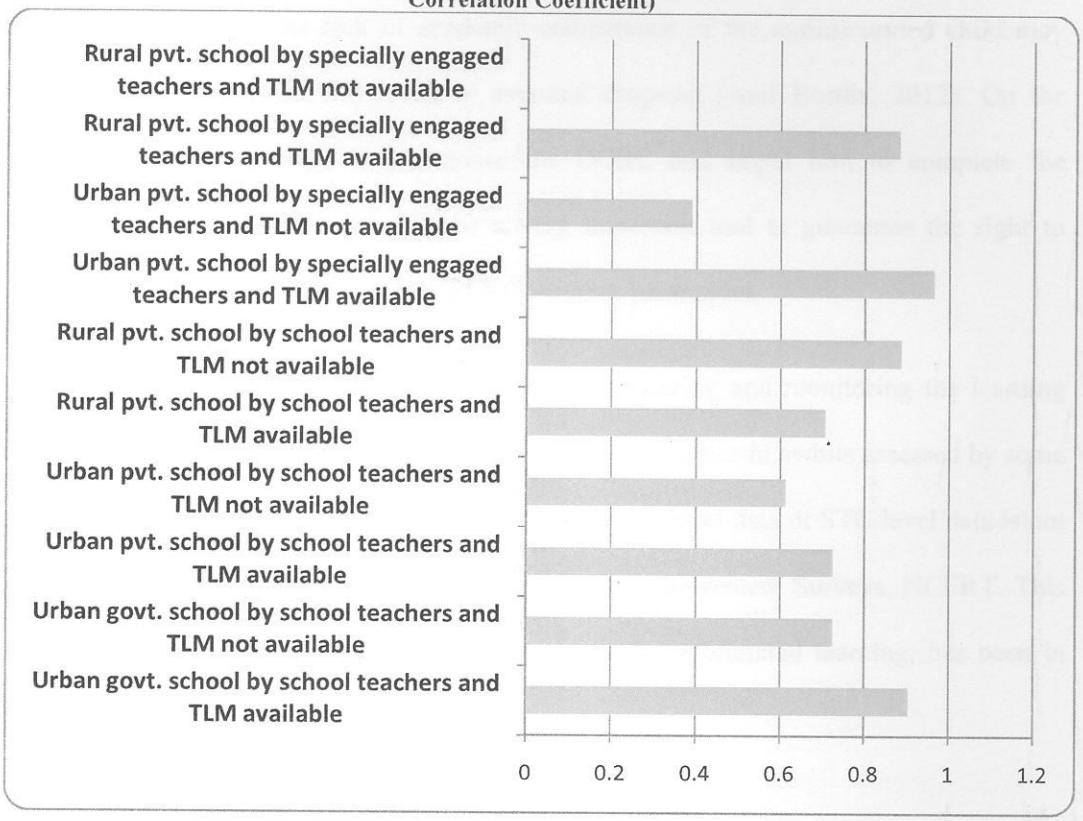
Figure 44: Aggregated Numbers of Education Volunteers versus Total Number of OOSC Trained (Pearson's Correlation Coefficient) [67]



Now the study attempts to deconstruct the variables further to assess the extent of correlation. We assess the effect of availability of TLM for ST on the other aspects that influence the delivery of ST. We note in **Error! Reference source not found.** that when TLM is not available correlation is poor in rural private school and urban private school when teacher are engaged specially for TLM. However, when school teacher impart ST, rural private schools show high correlation despite TLM not being available. Urban government schools correlates better when TLM is available.

[67] Tabulated by the author from DISE raw data.

Figure 45: Aggregated Numbers of Schools versus Total Number of OOSC Trained (Pearson's Correlation Coefficient)[68]



Correlation coefficients have little meaning without their associated statistical significance. Notably the associated significance of the above correlations has been negligibly small. The Pearson Correlation Coefficients and the associated significance values are tabulated in Table 7 : Pearson Correlation Coefficients of Aggregated Values versus Total Children completed ST.

Linkages of Special Training to Learning Outcomes after Mainstreaming

Special training may also be seen a mechanism for accelerated learning and/or remedial education that enables OOSC, once enrolled, to bridge the gap between the biological age and the academic age so that he/she can be mainstreamed into an age-appropriate class in the school, and thus be the beneficiary of the right to elementary

[68] Tabulated by the author from DISE raw data.

education guaranteed by RTE 2009. Besides anxieties arising from the socio-cultural and economic trepidation, the lack of academic competence of the mainstreamed child may further distress the child and result in eventual drop-out (Anil Bordia, 2012). On the contrary, good competence will reassure the OOSC and impel him to complete the education. Special training can thus be a very important tool to guarantee the right to elementary education. Hence, quality of ST becomes paramount.

Somehow, ensuring the quality of ST by measuring and monitoring the learning outcomes of the OOSC is aggregated to school level only, once in awhile assessed by some surveys, NGOs or researchers. In case of STC, the child level data or STC level data is not in public domain as in the case of ASER or School Achievement Surveys, NCERT. This notwithstanding, bridging courses which are meant for accelerated learning, has been in vogue since long the world over.