### **Progress Overview of Research**

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### Researches at National level under SSA - RTE

Research studies concerned with SSA are conducted at national level mainly by NCERT, NUEPA and Technical Support Group (TSG) of Ed.CIL. NCERT has been responsible for conducting achievement surveys at national level and also developing a system for regular Quality Monitoring through submission of quarterly reports.

The Research, Evaluation & Studies Unit (RESU) of TSG plays major role in getting large scale studies / surveys conducted when the need for any study or survey is felt by the Ministry of HRD or is suggested by the Joint Review Mission. There is a Research Advisory Committee which discusses research issues and suggests studies to be undertaken. Sometimes studies are conducted on issues arising from analysis of DISE data or need felt by TSG consultants in the course of their work. All the studies that are proposed have to be finally approved by the Committee for Approval of Research Projects (CARP) which is chaired by Secretary (EE&L), Ministry of HRD.

Generally, after the topic of research is decided, an outline of research proposal is developed by RESU and then proposals are invited from NGOs, universities and other organizations either by advertisement or by selecting agencies on the basis of their reputation and contribution in research. Sometimes Monitoring Institutions identified for SSA are selected for conducting research studies.

For the studies involving several states, effort is made to develop a common methodology and to prepare the tools of data collection centrally at TSG with the help of external resource persons. Also detailed sampling plan is developed and even samples of schools or villages are drawn centrally for all the participating states, to facilitate data collection and to ensure uniformity in sampling across states. This is particularly important since usually different agencies are selected for conducting the study in different states.

Given below is the information about national level research studies conducted so far or proposed to be conducted in 2011-12 with active involvement of Research, Evaluation and Studies Unit of Ed.CIL's Technical Support Group for SSA.

### A) STUDIES COMPLETED

### i) All India Sample Survey to estimate the number of Out of school children (2005)

A major sample survey was conducted in 2005 for assessing the number of out of school children in the country in the age group 6-14. While Research, Evaluation & Studies unit of Technical Support Group of Ed.CIL (India) Ltd. for Sarva Shiksha Abhiyan provided technical guidance and helped in selection of samples of villages and urban blocks and in estimation of the percentage and number of out-of-school children, the survey was actually conducted by **Social & Rural Research Institute -IMRB International (SRI-IMRB)** in all the states and Union territories covering rural and urban areas of 588 districts. Data were collected during the months of July to October 2005 from a sample of 87874 households in 3178 villages and 1823 urban blocks covering all the districts. The findings of the survey indicated that the country had about 19.4 crores children in the age group 6-13 (i.e. 6 to below 14 years), of whom 6.9% children were out of school.

Amongst the out of school children, 68.3% children had never attended school and 31.7% were dropouts. Further, out of those children who were attending school, 97.3% studied in Government or Private recognized schools (including recognized Madarsas/ Sanskrit Pathshalas) and another 1.8% attended unrecognised schools. The remaining 0.9% children attended Education Guarantee schools, Alternative & Innovative Education centres or recognized Madarsas/ Sanskrit Pathshalas. The report of the survey was published by EdCIL in 2006.

### ii) All India Sample Survey to estimate the number of Out of school children (2009)

A major sample survey was conducted in 2009 for assessing the number of out of school children in the age group 6 to below 14 in the country. Research, Evaluation & Studies unit of Technical Support Group of Ed.CIL (India) Ltd for Sarva Shiksha Abhiyan provided technical guidance and helped in selection of samples of villages and urban blocks and in estimation of the percentage and number of out-of-school children. The survey was conducted by **Social & Rural Research Institute -IMRB International** (**SRI-IMRB**) in all the states and Union territories covering rural and urban areas of 588 districts. Data were collected from a sample of 99,226 households in 3234 villages and 1856 urban blocks covering all the districts. The findings of the survey indicated that the country had about 19.1 crores children in the age group 6-13 (i.e. below 14 years), of whom 4.3% children were out of school, in 2005 this figure was 6.9%. Amongst the out of school children, 3.2% children had never attended school and 1.1% were dropouts. Among boys 3.9% children were out of school and among girls 4.6% children were out of school.

Amongst the states which had relatively high percentage of Out of school children are Arunachal Pradesh (10.6%), Delhi (5.0%), Orissa (7.0%) Rajasthan (8.4%), Uttarakhand (7.6%) and West Bengal (5.25%).

Following is the comparative picture of results obtained from the 2005 and 2009 surveys for estimating percentage of Out of school children. The report of the survey was published by EdCIL in 2010.

Out of School Children (%)		2005	2009
All (6-13 years )		6.9	4.3
Dropouts		2.2	1.1
Never attended		4.7	3.2
Age group	6-10 years	6.1	3.7
	11-13 years	8.6	5.2
By area	Rural	7.8	4.5
	Urban	4.6	3.2
by Gender	Male	6.2	3.9
	Female	7.9	4.7
By Social groups	SC	8.2	6.0
	ST	9.5	5.6
	Muslim	10.0	7.7
	<b>OBC+</b> others	5.6	2.7
Percentage of disabled children amongst		38.1	34.8
Out of school children			

#### iii) National Evaluation of Civil Works under SSA (2006-2007)

The National Evaluation of civil works was carried out by Ed.CIL (India) Ltd. on behalf of Ministry of Human Resources Development, Govt. of India by engaging an independent agency. This study was conducted in selected eleven (11) states representing all the regions throughout the length and breadth of the country.

The purpose of the study was to assess an overall performance of the states in terms of quality of works completed and in progress, problems faced by implementing bodies, responses of village/ ward committees as regards to financial and technical support provided to them, implementation of child friendly elements and cost effective measures, provisions for children with special needs, addressing environment friendly aspects etc. and hence to ascertain strengths, weaknesses of the concerned states along with suggestions/ recommendations for improvement.

The sites visited in the states were decided on the basis of stratification and random selection so as to represent different topographies, availability of construction materials and construction methodologies or technologies practiced within the state. A uniform set of tools approved by the Ministry was adopted in all states where the study was undertaken. Final state reports were prepared and sent to the states. Synthesis report has been prepared.

Main findings: It was observed that generally in all states VECs plan to provide additional facility for school premises in consultation with State Project Director. Some training has been imparted to the VECs on the various aspects of construction, record keeping etc. New building have been placed in the compound of the old school building in most of the schools. VECs took interest in the SSA works and were actively involved with the development activities. All the material related to the building construction was being procured from the local market at the lowest available price with the combined efforts of the VEC and the head teachers of the school. Building construction work was being carried out as per the specifications prescribed in the building estimates. Construction activities in schools were implemented through the Village Education Committees; purchase record/vouchers or stock registered maintained at site by the head teacher. Site in-charge had powers to stop or amend the poor construction, if undertaken at site by the VECs. Electricity connections were there in the school building in all urban schools and some rural school in all States. VECs were involved in the yearly maintenance of the buildings in the school complex. In all states, building maintenance funds were not adequate for annual maintenance of the school complex. No special provisions were made to ensure the safety and security of the girl students. Teachers made students aware of the need to keep their school and surrounding clean and made efforts to develop a sense of belonging to the school amongst students.

In Gujarat, Bihar, Maharashtra and Uttar Pradesh, the SPD office has prepared various options of building for the VECs to enable them to select the best possible option for their site as per the site conditions and land availability etc; some building models or pictures of constructed buildings were available to be shown to the VECs for their better understanding. Building construction supervision was carried out by the authorized representatives in Gujarat, Maharashtra, Assam, Bihar, Andhra Pradesh and Tamil Nadu.

In Gujarat, Chhattisgarh, Madhya Pradesh, Maharashtra, parts of Andhra Pradesh and Bihar some form of Third Party independent evaluation was being undertaken for the building construction and material in the state; some form of laboratory testing was also being carried out by the monitoring agencies in the State. Measurement book (MB) and other financial records were properly maintained, audited and kept in all states. Some form of cost effectiveness process was being implemented by the states to use locally available material for the construction activities in Gujarat, Jammu and Kashmir, Andhra Pradesh and Assam. The new constructed buildings were ventilated and lighted as observed during the field visits in all states. There was provision of compound walls in the school building in Gujarat and in urban schools of all states. Proper earthquake prevention techniques were being provided in the school buildings in Gujarat, Bihar, Uttar Pradesh, Assam and Chattisgarh.

In Tamil Nadu and Gujarat, schools took initiatives to develop and maintain provisions for Children with Special Need. In Gujarat, deviations in the basic planning and the construction activity were reported to the SPD for the sites where such activities took place, deferred maintenance was carried out through contributions in kind and cash in villages and *Water harvesting technique* was also present in the school premises. Some form of fire fighting provisions in the school buildings were available in Maharashtra.

### iv) Study of Scholastic achievement and literacy level of children at the end of primary stage (2005)

This study was conducted in four states – Uttar Pradesh, Orissa, Karnataka and Maharashtra. In each state, two District Primary Education Project's (DPEP) districts were selected for testing the students of terminal grade of primary stage (grade V in Uttar Pradesh and Orissa and grade IV in Karnataka and Maharashtra). The main objective of the study was to find out how various school and teacher variables affect students' achievement. The samples of schools selected for the study were the same as selected for Terminal Assessment Survey (TAS) of DPEP. The tests in language and Mathematics that have been used for testing students were the same as used in TAS, since the second objective of the study was to find out what the achievement level of students is after two to three years of termination of DPEP. A third objective of the study was to assess the level of literacy and numeracy attained by students who were about to complete their primary education, using appropriate tests of literacy and numeracy. Final reports were received from all the states. A short national report of the study was also prepared but not published.

**Main findings:** The average achievement (average of two districts) could be considered as satisfactory in Uttar Pradesh but quite poor in Karnataka and Orissa. The mean scores expressed as percentage of maximum marks in language and mathematics respectively, being 60.1 and 54.5 in Uttar Pradesh; 28.8 and 27.1 in Karnataka; and 50.1 and 38.9 in Orissa.

It is noticed that the achievement level assessed by TAS tests in language and mathematics had declined in all the three states after two years of termination of DPEP except in the language test in Orissa, in which it had increased

Achievement in literacy tests indicate that around only one-fourth of the students in Karnataka (27.1%) and Orissa (27.6%) could be deemed as literate. In Uttar Pradesh, the picture was better with more than half (54.2%) of students belonging to this group. Very few students were found to be fully literate i.e. scoring 75% and above. Only 0.5% in Karnataka and Uttar Pradesh and 1.3% in Orissa scored over 75% marks in literacy test. In all the three states, students' achievement in reading comprehension was higher than that in reading aloud and writing.

Development of numeracy skill was observed to be inadequate with more than half of the students scoring below 40% marks in the numeracy test in Karnataka (60.7%) and Orissa (53.7%). However, in Uttar Pradesh only 15% of the students scored below 40% marks.

### v) Study of Teachers' absence in primary & upper primary schools (2006)

The study was conducted in the state of Andhra Pradesh, Madhya Pradesh and Uttar Pradesh by covering 400 schools in each state. The study proposed to estimate teaching days lost due to teachers remaining absent from school and to ascertain the reasons for absence. Besides studying teachers' attendance from school records for the academic session 2005-06, teachers' attendance was observed during two unannounced visits to schools with a gap of 5 to 6 weeks between the two visits. Effect of teachers' absence on students' attendance and achievement, grade repetition and dropping out from school was also studied. The schedules for data collection were developed centrally and samples of schools were also drawn centrally by RESU. The study was conducted by three different agencies, one in each state, using common methodology and tools. An **abridged report** of the study based on the states' reports has been prepared and distributed. A synthesis report of the study was published by EdCIL in 2009.

**Main findings :** In the year 2005-06, on an average day the teachers not present in schools constituted 24% in Andhra Pradesh, 15.4% in Madhya Pradesh and 11.0% in Uttar Pradesh. These included 14.9%, 10.6% and 5.4% teachers respectively who were on legitimate leave in these states. Some were not present due to being on official duty elsewhere or on training. The percentage of teachers who were absent without intimation was only between 2.3% to 2.6%.

Absence rate for teachers was almost the same for male and female teachers. Also the absence rate of teachers in rural and urban schools and teachers belonging to different social groups (SC, ST etc.) did not differ much.

Twenty four predictor variables plus teachers' absence rate were used to study their relationship with language and mathematics achievement across in class V and class VII/ VIII. The regression analysis indicated that teacher' absence rate was not significantly related with students' achievement either subject in class V in the case of each of the three states. Students' language achievement scores for class VII/ VIII also failed to confirm the said relationship. However, Mathematics achievement for class VII/ VIII did provide statistically significant contribution of teachers' absence rate but that too is not substantial.

#### vi) Study of Students' attendance in primary and upper primary schools (2006)

The study was conducted in 20 major states including Delhi. The sample size in each state varied between 300 and 400 schools. The attendance of students was separately estimated for different groups of students from school records as well as head counting during 3 unannounced visits of schools. Estimation of effect of students' attendance on students' achievement, repetition rate and drop out rate were also the part of the study. The schedules for data collection and sampling plan were finalized centrally. The study was conducted by different agencies in different states, using common methodology and tools. An **abridged synthesis report** of the study based on the state reports was prepared and distributed. Full synthesis report was published by EdCIL in 2009.

**Main findings:** It was found that overall average attendance rate of students was 68.5% at primary and 75.7% at upper primary levels. For teachers, the average attendance rate was 81.7% in primary schools and 80.5% at upper primary schools.

The attendance rate of girls was a little higher than that of boys. The average attendance rate of boys and girls at primary level in the first hour was 69% and 70.6% respectively, and at upper primary level, 75.2% and 78.7% respectively. The average attendance rate in first hour was a little lower for SC and Muslim students at primary level (68.7% and 66.4% respectively) compared with that of all students but at upper primary level there was not much difference between attendance rates of different social groups; these were between 76% and 79%.

The lowest attendance rate was in class I (65.6%); it increased gradually after that by 2 to 3 percentage points from one class to the next; however, there was no such increase from class IV to V. The overall average attendance was a little lower in rural schools than urban schools (68.0% and 71.2% respectively at primary level), but in some states, the opposite was the case. Similar was the trend at upper primary level (73.7% in rural schools and 79.7% in urban schools).

The main reasons for children absenting from schools given by head teachers, teachers and VEC members were (a) lack of adequate facilities in school, (b) teacher shortage and overcrowded classrooms, (c) children being required for household work or sibling care at home and (d) children required to help parents in agriculture or occupational work or participation in other income generating activity and (e) parents' indifference or lack of interest in child's education.

Parents mostly felt that lack of facilities in school and child's unwillingness to go to school were main reasons for child's frequent absence from school.

### vii) Study of Deployment and Competence of Para teachers (2008)

In several states para-teachers have been deployed in large numbers to meet the shortage of teachers at the primary level. This study was conducted to assess their performance and professional competence and to find out how they were recruited, their job satisfaction, their training needs, the problems they face and the kind of support they require for functioning effectively. The study was conducted in 12 states where para-teachers are employed on a

large scale, namely Andhra Pradesh, Chhattisgarh, Gujarat, Bihar, Jharkhand, Uttar Pradesh, Rajasthan, Uttarakhand, Jammu & Kashmir, Madhya Pradesh, Maharashtra and Orissa. The study was commissioned to National Council of Applied Economic Research. Its draft report was received in February, 2008. Comments were sent on the draft report on the basis of which the draft report was revised. The final report was received from NCAER in November 2008. An abridged report of the study was published by EdCIL in 2009.

**Main findings:** A review of policy of states in the sample suggested that there was considerable variation in respect of recruitment of teachers on contract. Not only there are different nomenclature, tenures of service for these teachers are not the same in the different states. The tenure varied between 11 months to 60 months. However, in most cases the tenure was extendable on satisfactory performance.

The minimum prescribed qualification of the teachers appointed on contract also varied across states. Generally it was lower than that prescribed for regular teacher cadre excepting in two states, Gujarat and Maharashtra. About one-fourth of the para teachers in all the states were post graduates and more than one-third of the teachers were graduates.

The policy in states about recruiting these teachers is still evolving. In some states in the sample, recruitment of para teachers has been stopped while in some other states teachers are first recruited on contract basis and then regularized. The role of PRI institutions appeared to be marginal in recruitment of para teachers.

In almost all the states para teachers were deployed in both rural and urban areas depending upon requirement. However, about 75 percent of para teachers were working in rural areas and about 25 percent work in schools where there was only one para teacher. About 54 percent of para teachers were females. One of the important consequence of appointment of para teachers appeared to be improvement in pupil-teacher ratio. The survey results revealed the pupil-teacher ratio to be 36:1. However, the states like Bihar, Jharkhand and Uttar Pradesh are yet to achieve the target.

The remuneration or honorarium paid to para teachers varied from state to state. The highest remuneration was paid in Uttarakhand. In Chhattisgarh, Jammu & Kashmir and Madhya Pradesh there were grades of para teachers. In Bihar, Jharkhand and Maharashtra it was different for trained and untrained para-teachers. In some states the para teachers were paid very low remuneration.

Nearly 45 percent of para teachers working in different states were untrained. Most of the states organized induction and in-service training for para teachers. The duration of such training varied from 7 days to 60 days across states.

It was deserved that though professional teacher training is generally helpful; only four out twelve states in the sample encourage and/or provide avenues for such training through distance learning.

More than 85 per cent of head teachers had rated the para teachers either 'good' or 'very good' in their performance with very little variation across states. Largely, para teachers

were satisfied with their job but many expressed dissatisfaction about the honorarium they got. Demand for better salary and equality of status with regular teachers was almost universal. To sum up, para teachers were rated as good as regular teachers; they were deployed mostly in rural areas and majority of them were female teachers. They received much lower remuneration than regular teachers but their performance was good. They were, however, dissatisfied with their emoluments and service conditions.

### viii) Time-on-task study of students (2008)

The study aimed at finding out how the students spend their time in school and how much of their time is spent on different types of learning activities in the classroom. The study provides estimates of the average time spent by them on broad patterns of curricular, cocurricular and other activities inside and outside the class-room. The study was conducted in Assam, Haryana, Karnataka, Orissa and Maharashtra with the help of State Councils of Educational Research & Training. Development of tools and sampling plan was undertaken centrally. Lecturers of District Institutes of Education & Training worked as observers in classrooms and helped in collection of other data. They were given training of 4 to 5 days in observation of classes and recording their observations. Classes of grades II, IV and VI were observed for the study. The sample consists of 100 schools in each state.

Teachers' and student's activities in the class were observed by an observer using a modified version of classroom observation method developed by Jane A. Stallings. For this purpose language and mathematics class of grade II, language, mathematics and EVS of grade IV and Language, Mathematics, Science and Social Studies of grade VI were observed.

Each class of 30 minutes duration was split into 10 equal parts each of three minutes duration. The first minute of the three minutes were used for observing students' and teachers' activities and the remaining two minutes were used for recording the observation.

SCERTs sent the data on CD and data analysis was done centrally by RESU. Data analysis results were sent for report writing to SCERTs of the 5 states. A synthesis report prepared by RESU on the basis of data analysis done at RESU was published by EdCIL in 2010.

**Main findings:** The 17 possible activities which teachers generally undertake in a classroom were broadly classified as i) students centric activities, ii) teacher centric activities, iii) supportive instructional activities, iv) class management and v) Off task activities. Similarly, 19 students' activities generally undertaken by students were also classified as (i) active learning activity (ii) passive learning activity, (iii) mechanical learning activity, (iv) class management, (v) being off task.

Less than one third (an average of 29%) of the teachers' time in classroom was spent on students' centric activity. It was 27.6% for grade II, 26.2% for grade IV and 30.8% for grade VI. Percentage of time spent by teachers' in classroom on teachers' centric activity for grades II, IV and VI was 53.3, 56.3 and 55.9% respectively. Percentage of time spent

by teachers on supportive instructional activities was 14.1% in grade II, 13.6% in grade IV and 10.5 in grade VI. Percentage of time spent by teachers' on 'class management' activities and 'being off task' was 2.1% and 2.9% for grade II, 1.5% and 2.4% for grade IV, 1.5% and 2.1% for grade VI respectively.

Overall, students' time spent on active learning activities was about 25% of total studenttime. Students' time spent on active learning gradually declined from 26.4% in grade II to 22.0% in grade VI. Of the total time of students' classroom activities, time spent on passive learning activities was 46.9% on an average. The average student- time spent on learning activities of mechanical type was 15.4% of total student- time. It was highest (20.4%) in Haryana and lowest (11.6%) in Maharashtra. Overall, the time of students spent on class management was about 5%. It was lowest (2.4%) in Assam and highest (6.5%) in Haryana. Students' time spent on class management activities increased marginally from 4.8% in grade II to 5.3% in grade VI. The average time when students were off- task was 7% of total student-time. It was least (6.5%) in Haryana and highest (10.4%) in Karnataka. Off- task activities of students also indicate the same pattern as that of class management, i.e. maximum time was in grade II (9.1%) which declined to (6.3%) in grade VI.

#### ix) Study on effectiveness of Block Resource Centres and Cluster Resource Centres in providing academic support and supervision to elementary schools (2008)

The purpose of the study was to find out how effective the Block Resource Centres and Cluster Resource Centres are, in discharging their designated role and responsibility to improve and maintain academic performance in primary and upper primary schools. The study is expected to provide insights to Ministry of Human Resources Development and State Governments on how these centres are functioning and what more needs to be done to make them effective for delivering the services expected of them. The study was conducted in 14 states (Assam, Haryana, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Kerala, Madhya Pradesh, Mizoram, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal).

Seven agencies including 3 Indian Institutes of Management were selected to conduct the study in different states. Data analysis plan developed at RESU was discussed with the agencies. Final analysis plan was supplied to all the agencies. Data analysis plan was prepared by RESU. Draft reports of the 14 states were received. Comments were sent on the Draft reports. Final state reports were received after necessary modification from IIM, Bangalore (Karnataka and Kerala) ; NCDS, Bhubaneshwar (Orissa and West Bengal), IIM, Lucknow (Uttar Pradesh); SPRI, Jaipur (Madhya Pradesh, Rajasthan and Himachal Pradesh); XLRI, Jamshedpur (Jharkhand and Haryana); NIAR, Mussorrie (Jammu & Kashmir and Punjab) and IIM, Calcutta (Assam and Mizoram). Dr. S. Nayana Tara of IIM, Bangalore prepared a synthesis report but excluded Assam and Mizoram as the reports of these two states were submitted late by IIM, Calcutta. The synthesis report was, however, revised later to include the findings for Assam and Mizoram. A presentation on the study was made at MHRD and also at the 10<sup>th</sup> JRM. The synthesis report was published by EdCIL in 2010.

**Main findings:** The academic structures BRC and CRC, set up for SSA are discharging their duties and responsibilities as defined in the framework for implementation of SSA. The core structures of SSA at the district, block and sub-block levels were generally well established for administrative purposes. Most of the states under study have retained the generic nomenclatures of positions at the district and block levels. However, it was noted that in West Bengal and Haryana, there were no regular BRPs and some experienced teachers were deployed during training programmes. In the case of Karnataka, a post of Cluster Assistant Educational Officer was created to off-load some administrative tasks of BEO.

The views of District Project Coordinators were that the BRCs were overloaded with administrative work, had inadequate infrastructure and were burdened with too many training programmes. They had insufficient official power and suffered from lack of recognition for good work. Also lack of transport facilities affected the performance of BRC and CRC functionaries. Some of the perceived problems at the CRC level included insufficient capacity building of CRCCs, lack of job knowledge, non-acceptance of teachers to adopt innovative teaching methods and of CRCCs themselves by teachers.

SSA is envisaged as a decentralized programme but in most cases the power vested with the BEOs undermined the BRCCs' position. By and large, BRCCs, BRPs and CRCCs were satisfied with regard to most of the aspects but some discontent was found in respect of physical infrastructure, existing emoluments and balancing between administrative and academic work.

Training received by BRCCs, BRPs and CRCCs was inadequate both qualitatively and quantitatively. Training received by teachers appeared to be satisfactory quantitatively barring a few exceptions. A significant proportion of teachers appeared to be satisfied with training effectiveness across all the states, though there were some areas which reportedly needed to be addressed. Areas in which training was relatively less effective or deficient according to the respondents included less focus on needs of CWSN and multi-grade teaching methods. Training received by VEC members was woefully inadequate and practically defunct in many cases.

Some of the problems stated by CRCCs were infrequent visits by BRC personnel, difficulty in contacting the BRC personnel, poor leadership displayed by them in addressing various issues, poor training capability and lack of emphasis on quality.

A few critical areas of concern as reported by BRPs were: planning, monitoring and supervision, introducing need-based training programmes, developing infrastructure, addressing shortage of staff and need to introduce IT.

The major educational issues at the cluster level included migration of parents, clamor for English medium schools, poor participation of VECs, inappropriate teaching methods, inadequate teaching staff, deployment of teachers for non-teaching activities and prevalence of child labour.

Heads of schools stated that periodic review and planning of academic activities, more visits by BRC/CRC functionaries and frequent training activities would improve school

functioning. They also emphasized the need for providing additional nutrients to students in MDM, generating awareness among community members and good school infrastructure.

VEC forms the weakest link in the organizational structure of SSA in all the states covered. Training of VEC members was a neglected area. VEC members suggested that frequent visits by BRC functionaries to interact with them, guide them regularly on different issues and take prompt action on complaints lodged by the VEC would improve the situation.

**Suggestions:** The staffing pattern, mode of recruitment and posting for a minimum period for BRCCs and CRCCs must be ensured. A separate cadre and recruitment rules be put in place for BRCCs, BRPs and CRCCs. It is recommended that cadre and recruitment rules be framed for these positions along with suitable administrative powers. Incentives should be put in place for these functionaries to make the posts attractive. At the same time, it becomes imperative that performance appraisal system be put in place so that it also facilitates appropriate monitoring and supervision of academic activities of these structures.

Their job charts must be prepared which should be common across states and given to the incumbent during inductions training which is to be put in place. Adequate infrastructure (including adequate facilities for conduct of residential training programmes) at the BRC, posting of a full complement of BRPs in each of the BRCs, posting administrative support staff including an accountant, appropriate IT facilities including telephone/fax/internet, transport facility etc are very much needed for effective functioning of BRCs.

It is recommended that the BRP-school ratio should be 1:15 for lower primary schools and 1: 10 for upper primary schools. It is very essential that the BRPs have requisite qualifications and subject specialization for dealing with upper primary classes.

There is a critical need for capacity building of all incumbents in the academic structures of SSA with a focus on improving knowledge, communication stills and personality development. The officers at the district and state levels must also be given training in management, soft skills in computer usage, in addition to the training of staff in BRCs, CRCs, DIET and SCERT.

There is a felt need for strengthening the forward and backward linkages of BRCs. Also there is an urgent need to build strong linkage with VEC which is at present a major lacuna across states.

The personnel in BRCs and CRCs were overburdened with administrative tasks and meetings to the detriment of the programme effectiveness. Convergence of all structures must be ensured. Further, there is a need to streamline the training programme of teachers. Monitoring and supervision must be strengthened and timely action must be taken to infuse accountability into the system. In the ultimate analysis, the structures created for SSA must serve the purpose for which they were created and an all out effort must be made to ensure this.

### x) All India Sample Survey for estimation of Dropout Rates (2009)

The study aims at providing estimates of grade-wise repetition and dropout rates, cohort dropout rate, completion rate as well as transition rate from primary to upper primary based on the data of 2006-07 and 2007-08. This study was also expected to provide information on other indicators such as rates of transfer between schools and mainstreaming of children from Alternative and Innovative Education Centres to schools. The study was conducted in all the 21 major states of the country. The study was commissioned to Development and Research Services. The sampling design was prepared centrally and a sample of schools in all 21 states was drawn, tools were developed, field tested and finalized at national level. In all these activities RESU was actively involved and provided advice and help to the agency at every stage.

Data was collected from a sample of 8,016 schools with total enrolment in these schools being 10,69,417. Data was collected on grade wise enrolment and retention of students for two years 2006-07 & 2007-08. Information on school leavers as well as of students remaining absent for over 15 days, was obtained from each school and the homes of these children were visited to verify whether these children were still in the educational system or had dropped out. In all 47,095 households of school leavers and 5,386 households of students who were absent for over 15 days were visited. The percentage of students who were absent for over 15 days was only 0.51%.

The study estimated percentage of school leavers as well as percentage of dropouts amongst school leavers (2007-08) on the bias of visits to the homes of school leavers.

Cohort drop out rate was also computed from the data on school leavers for the years of 2006-07 & 2007-08 by the Reconstructed Cohort method.

However, since the dropout rates were found to be very low in some states, a committee of experts was appointed to examine the soundness of the methodology and veracity of the findings. The committee found the methodology adopted for the study quite satisfactory but in view of the large difference between dropout rates given by this study and the dropout rates from other sources of data, recommended that a repeat survey in a sub-sample should be conducted for validation of the findings of this survey. The repeat survey is being conducted in 2011-12.

### xi) Reasons for large decline in enrolment between class I and class II (2009)

The main objective of the study was to find out the reasons for large decline in enrolment from class I of one year to class II of the following year. It was conducted in samples of 100 primary and upper primary schools in four states -West Bengal, Bihar, Assam & Meghalaya, in which the decline was sharp. Child tracking method was used to find out where the children admitted in class I in a given year are in the following year. It was conducted with the help of State Councils of Educational Research & Training, District Institutes of Education & Training, Block Resource Centres and Cluster resources Centres. While SCERTs prepared state reports, a synthesis report prepared by RESU covering all the four states. This report was published by EdCIL in 2010. **Main findings:** The following table shows the percentage decline in enrolment between class I & class II and reasons for decline in enrolment in the year 2005 & 2006 as per school records. The most common reason is that many children enrolled in class I repeat the class and do not get promoted to the next class in the following year.

in chi officit									
Students status	Assam		Bihar		Meghalaya		West Bengal		
	2005	2006	2005	2006	2005	2006	2005	2006	
No. of pupils in class I	5568	4892	15322	14647	2964	3023	10925	10991	
Decline%	15.4	15.0	34.5	31.9	22.9	24.8	36.4	37.3	
Repeater (%)	8.4	8.2	27.3	27.0	14.4	14.2	28.2	28.3	
Joined other Govt. schools	1.1	1.3	1.0	1.3	1.4	1.6	1.9	2.4	
(%)									
Joined Pvt. Schools (%)	0.7	0.9	2.0	1.5	3.6	5.5	0.8	1.0	
<b>Discontinued studies</b> (%)	1.9	1.8	1.9	0.9	2.1	1.9	3.4	3.5	
No response (%)	3.3	2.8	2.3	1.2	1.4	1.6	2.1	2.1	

Table 1: Decline (%) in enrolment between class I & class II and reasons for decline in enrolment

The study reported that percentage of repeaters was higher among children admitted late. Table 2 shows that 3% to 4% children of grade I left school in Assam, Bihar & West Bengal, whereas this percentage was higher in Meghalaya (9.8%). The most common reasons for leaving the school and shifting to another school, were (i) the other school was nearer home and (ii) another sibling was already studying in the other new school. Unsatisfactory teaching and inadequate facilities in schools were also significant reasons in some cases.

	Assam	Bihar	Meghalaya	West Bengal
Students who left school (%)	3.4	3.5	9.8	3.1
Reasons for leaving schools				
New school was nearer home	25.0	16.2	39.2	36.0
Sibling already studying in the				
new school	23.1	29.7	24	7.1
Unsatisfactory teaching in				
school	13.5	16.2	6.1	14.9
Inadequate facilities in school	7.7	18.5	8.8	13.7
No response	30.7	22.4	21.9	28.3

Table 2 : Reasons for leaving school after class I %

### xii) National Evalaution of Kasturba Gandhi Balika Vidyalaya scheme, Gender Unit, TSG- Ed.CIL, (2007)

The major aim of the study was to asses whether the objectives of the KGBV scheme were being met in operationalised KGBV schools. The study was undertaken in 12 states of Andhra Pradesh, Arunachal Pradesh. Bihar, Gujarat, Himachal Pradesh, Jharkhand, Karnataka, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu & Uttar Pradesh. Evaluation was conducted by six teams of 2 members each. Each team visited 2 states. Data was collected through observation, discussion with stakeholders and study of related

documents. After the field visits the entire team met to discuss the state findings and developed a national synthesis report based on the state reports.

**Main findings :** In all states, as new buildings were coming up at the time of evaluation, most KGBVs were in temporary places (rented or otherwise). In eight of the 12 States visited all the KGBVs sanctioned were functioning. In remaining States like Bihar (18), Jharkhand (19), Orissa (7) and Uttar Pradesh (27), KGBVs were yet to be set up.

KGBVs in most of the states had a high proportion of older girls who had dropped out. In States like Arunachal Pradesh, Bihar, Gujarat, Rajasthan and Uttar Pradesh never enrolled girls were also admitted in the KGBVs. Their proportion varied from 69 % in Gujarat to 11% in Rajasthan. Across the States, girls in most of the KGBVs seemed to have settled down well, were happy and confident. By and large, the retention of girls was fairly good in most of the KGBVs visited.

Curriculum in many KGBVs was quite enriched. The teachers were not familiar with techniques for accelerated learning. There was need for a policy/guideline for the recruitment and training of KGBV teachers and some kind of forward planning for the teachers to motivate them. Many of the part-time teachers were young with a lot of potential.

In most KGBVs the local community seems to be playing an active / positive role. All the state governments have paid special attention to the security and safety of the students. In almost all the KGBVs, the real guardians were the cooks, helpers and in some they were wardens / part-time teachers. The teachers and all those involved in the management of the KGBVs showed a high level of commitment. Parents want KGBVs to be extended to class X. Some states like Andhra Pradesh have already extended the programme to class X.

### xiii) National Evaluation of Kasturba Gandhi Balika Vidyalaya scheme, Gender Unit, TSG- Ed.CIL, (2008).

The second phase of the above study was undertaken in another 12 : states Assam, Chhattisgarh, Haryana, Jammu & Kashmir, Maharashtra, Manipur, Meghalaya, Mizoram, Punjab, Tripura, Uttarakhand and West Bengal. Evaluation was conducted by six teams of 2 members each. Each team visited 2 states. Data was collected through observation, discussion with stakeholders and study of related documents. After the field visits the entire team met to discuss the state findings and developed a national synthesis report based on the state reports.

**Main findings:** In the 12 states, only 67.7% of the approved KGBVs were operational. Reasons for shortfall ranged from difficult terrain, high cost of building (J & K) to delay in selection of NGO for running the KGBV.

Majority of girls studying in KGBVs were ST (44%), SC (21%), OBC (19%), Muslims (8%) and from poor families (9%). In Meghalaya, managemaent of KGBV was given to a missionary institution where only catholic girls were being enrolled, which is a violation

of the guidelines. In Punjab and West Bengal, these Vidyalayas were being used as hostel facility for girls enrolled in regular schools.

Most of the States especially Mizoram, Haryana, Maharashtra, Uttarakhand & Jammu & Kashmir, had not imparted training to KGBV teachers/ wardens. There was a need to impart training to sensitize the functionaries in all the states on gender issues.

Presence of female coordinator at state/district level ensures sensitivity to various physical/medical needs of adolescent girls. Hygiene, sanitation and physical environment emerged as a serious issue in some of the KGBVs in Chhattisgarh and Maharashtra.

### xiv) Evaluation of National Programme for girls at elementary level (NPEGEL) Gender Unit TSG- Ed.CIL, (2008)

The study was undertaken in 12 states of Assam, Chhattisgarh, Haryana, Jammu & Kashmir, Maharashtra, Manipur, Meghalaya, Mizoram, Punjab, Tripura, Uttarakhand and West Bengal to assess whether the objectives of the NPEGEL scheme are being met in educationally backward blocks where the scheme had been operationalised. Evaluation was conducted by six teams of 2 members each. Each team visited 2 states. Data was collected through observation, discussion with stakeholders and study of related documents. After the field visits the entire team met to discuss the state findings and developed a national synthesis report based on the state reports.

**Main findings:** The basic purpose of this scheme does not seem to have been met in the states. But evidence of planning with a detailed annual calendar of activities developed at block level for activities around the cluster schools, was visible in Chhattisgarh,

In some states the infrastructure development is of good quality – the MCS room and toilets well constructed with the requisite equipment being in place. While the infrastructure was there, its proper use was not being made in some cases.

The library books and TLM had been provided in the majority of states, but usage is a critical factor. The use of library and supplementary reading material in classroom transactions was not yet being made. Under the NPEGEL scheme sports events, symposiums, debates and cultural programmes were carried out at zone, district, block, and even cluster level in 3-4 states. These competitions instilled a sense of achievement and confidence in the girls,

Provision of cycles has been quite popular and where (like in Tripura, Chhattisgarh) it is targeted towards girls who live more than 2 to 3 km away, in non-hill regions, it is also being perceived as an intervention to improve attendance. Cycling to school really improves the self confidence level of girls.

Vocational training inputs, despite being gender stereotypical, somewhat helped in improving retention of girls; parents, teachers, communities and girls themselves were very happy with them.

In a couple of states like J&K and Chhattisgarh remedial teaching and student evaluation for learning outcomes was carried out at block & cluster levels to raise the learning capacity of girls. Remedial teaching and private tuitions were fairly common as parents and girls are eager to do well in examinations once they are in school.

In none of the states, the SSA state offices had established any formal linkage with Open School system, perhaps because of a lack of vision. This is a major lacuna in the scheme which needs to be addressed by all the states so that the efforts of the scheme are not in vain.

### xv) Role of VECs/PTAs/SMDCs/urban local bodies etc. in School Management and Supervision in the context of SSA (2009).

The purpose of this study was to make an assessment of community and school management bodies in management and supervision of schools and to find out to what extent they have achieved their objectives and what kind of problems or difficulties they have been experiencing in their work.

The study was undertaken in Bihar, Delhi, Haryana, Jharkhand, Kerala, Karnataka, Madhya Pradesh, Maharashtra, Mizoram, Nagaland, Punjab, Rajasthan, Uttarakhand and West Bengal. While National University of Educational Planning and Administration coordinated this study, RESU was actively involved in developing the research design, tools and data analysis plan. For each state an institution was selected to conduct the study within the state. State reports were prepared by the concerned agencies and a draft synthesis report was prepared at national level by NUEPA.

### xvi) Study on teaching of English at primary level

This study attempts to provide an understanding of the way English is being taught in government primary schools across the country. The focus was on assessing the appropriateness of material included in English textbooks of primary classes; to identify the lacunae in the existing textbooks; to find out how English in taught in the classes in which it is introduced for the first time; to make an assessment of training programmes for preparing teachers of English; and to assess their competence of teaching English at the primary level.

National Council of Educational Research and Training was entrusted with the task of conducting this study in 8 states (Gujarat, Uttar Pradesh, Chandigarh, Nagaland, Maharashtra, Tamil Nadu, Orissa and Jammu & Kashmir). The study has been completed and its draft report is ready.

### B) RESEARCH STUDIES IN PROGRESS

### i) Third party Evaluation of Civil works including environmental assessment in 12 states (2<sup>nd</sup> phase)

It will be similar to the study undertaken in 12 states in the year 2006-07. In this phase the study was undertaken in 12 other states. Draft reports of 12 states were received and shared with the states. The comments received from states along with comments from TSG & MHRD have been forwarded to agency for finalizing the report.

#### ii) Impact of in-service teacher training on classroom transactions.

This study is being conducted to assess the impact of in-service teacher training programmes on teachers' classroom transaction in different states. Its focus is on finding out how far teachers' training has affected teachers' classroom practices.

The States covered in this study are Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Jammu & Kashmir, Orissa, Madhya Pradesh, Maharashtra, Meghalaya, Nagaland, Rajasthan, Tamil Nadu, Uttar Pradesh & West Bengal.

National Council of Educational Research and Training is entrusted with the task of coordinating the study at the national level. Evaluation of training modules has already been done for all the states. Data collection is over and analysis of data is in progress.

### **STUDIES TO BE COMMISSIONED IN 2011-12**

### i) National sample survey for assessment of Teachers' and Students' Attendance rates in 2011.

The study which was conducted in 2006-07, is going to be repeated in 27 major states in 2011-12.

### ii) Sample survey for estimation of drop out rates in North Eastern States.

A survey for estimating dropout rates was conducted in 21 major states including Delhi but no North-Eastern state except Assam was covered in this survey. Now a survey is being conducted in all the NE States except Assam, using the same methodology that was used in the survey conducted in 21 states. Development & Research services (DRS) which was selected for conducting the study, has already started data collection in the 7 NE states. The study is expected to be completed by December, 2011.

### iii) Assessment of access to facilities for primary and upper primary education in tribal areas

The problem of access to schools is more serious in tribal areas of the country than in non-tribal areas. This study was proposed to assess availability of schooling facility in habitations inhabited largely by tribal population and participation of tribal children in elementary education in such areas. The study would cover revenue villages and towns of districts from states which were identified as Special Focus districts having 25% or more ST population. Modifications in ToR suggested by CARP were made. The study is going to be coordinated by NUEPA.

### iv) Assessment of access to facilities for primary and upper primary education in Muslim predominant areas.

It is felt that the areas in which there is concentration of Muslim population, existence of educational facilities and participation of students is not as much as in other areas. The present study is proposed for assessment of availability of elementary education facilities and use being made of these facilities by Muslim children. Study plans to cover villages and towns of 30 minority concentrated districts out of 28 districts in 13 states identified under SSA as Special Focus districts having 20% or more Muslim population. Hyderabad and Kolkata will be excluded as these are Urban Metropolitan districts with adequate elementary education facilities for all children. Modifications in ToR suggested by CARP were made. The study is being coordinated by Jamia Millia Islamia.

## v) Follow up survey for assessment of dropout and retention rate at elementary stage

As desired by MHRD, a sample survey was commissioned by EdCIL during 2008-09 to provide estimates of dropout rates for 21 major states including Delhi. In this survey an attempt was made to identify dropouts among school leavers, using child tracking method. The survey provided estimates of annual class-wise repetition and dropout rates as well as Cohort Dropout rate for the years 2006-07 and 2007-08 for every state for all students enrolled in primary and upper primary classes as well as for boys and girls and students belonging SC, ST, OBC and Muslim community. The survey, however, did not provide estimates of Transition rate between the last primary grade and the first upper primary grade.

The survey will follow the same approach but the sample will be only about 25 percent of the 2008-09 survey. It will help in validating the methodology and providing estimates of dropout rate and other indicators for another year, that is, 2009-10 also. It will also provide estimates of transition rates which could not be obtained from the previous survey. The agency for conducting this survey has to be selected through advertisement given in newspapers. Selection of agency for conducting this study out of the short-listed agencies, has been made. The MOU has been signed.

### vi) Development of methodology and tools for study of Classroom processes.

With increasing stress on quality of education, greater need for studies on quality aspect is felt. Since learning depends mainly on how the teacher teaches, studies on classroom processes have become important. Many states are interested in conducting such studies but they lack suitable tools for that. Since no simple tool to assess classroom processes in a scientific manner is currently available, it is proposed to get such tool prepared and to validate it after trying out in a couple of states. Modifications in ToR suggested by CARP have been made and now the tools have to be tried out and finalized. It is an inhouse project of RESU.

### vii) Study of Inclusion and Exclusion of students in primary and upper primary schools.

Indian society is highly heterogeneous and diversified. Education has often been seen as the key instrument for bringing about a social order based on value of equality and social justice. Inclusion and exclusion issues need to be identified and handled with sensitivity as well as firmness. In fact, one of the important challenges faced has been the persistence of certain discriminatory practices in society and also in our schools. There is also a need to develop pedagogic practices that aim at improving self esteem and identity of these children. Indeed, social transformation starts with a desire to change and in this process, teachers have a critical role to play in making sure all children have the opportunity to participate irrespective of their ability, gender, ethnicity, caste and class.

Hence the need for a study of "Inclusion and Exclusion of students in primary and upper primary schools" was felt that will take a broader view of discrimination in schools and classrooms. The study will be conducted in rural areas of six states: Andhra Pradesh, Assam, Bihar, Odisha, Madhya Pradesh and Rajasthan. Work on the study has started. Six agencies for conducting the study in the six states have been identified.

### viii) Baseline Survey of school scenario is some state in the context of RTE

A proposal for this study was submitted by TISS, Mumbai. The Study is expected to provide a broad understanding of the differentiated school scenarios in Delhi, Andhra Pradesh and West Bengal. The study would also explore the concern surrounding the RTE among key stakeholders of school education and provide insight about how RTE is actually implemented across different states, how the broad structure of schooling system in India will evolve in the coming years and how concerns of social equity will be served. MHRD has agreed to support this study and now the study is in progress.

# ix) Impact of Early learning, socialisation and school readiness experiences in pre-school setting of educational and behavioural outcome along the primary stage

The study is being conducted by Centre for Early Childhood Education and Development, Ambedkar University. This study is expected to provide information about trends in ECE provisions across sectors in rural, urban and tribal areas and trends in participation of children in these provisions. MHRD will support the study in one of the states, namely, Assam.

### C) OTHER ACTIVITIES OF RESU

#### Annual meeting of Research & Evaluation Coordinators

Research Evaluation and Studies unit (RESU) organises annual meeting of Research & Evaluation Coordinators to review the Research & Evaluation work being done in the states and for sharing of experiences in research among states. Till now seven meetings have been organized under Sarva Shiksha Abhiyan. The seventh meeting was held at Bhubaneshwar on 3-4 December, 2010.

The main agenda of the meeting was to review the research studies conducted or completed during the previous year or the current year and to discuss the agenda of research for the year 2011-12.

#### Capacity Building Workshop on Research Methodology for North Eastern States

A workshop was held in Imphal from 23<sup>rd</sup> May, 2011 to 28<sup>th</sup> May, 2011 for capacity building of SSA functionaries in North Eastern Region of India on Research Methodology. It was attended by about 45 participants from five States – Manipur, Tripura, Sikkim, Assam and Meghalaya.

The focus of the programme was on Research Methodology with particular reference to Achievement Survey. During the programme participants were given orientation on preparation of a research proposal, development of achievement tests, item analysis, sampling, ensuring data quality, developing questionnaires, Qualitative methods in research, Action research, Use of DISE data in research etc. Also hands on experience was provided to participants in developing research proposals, writing of test items and preparation of questionnaires.

#### Publication of Research abstracts and research reports

Abstracts of research studies conducted in different states and at national level during the last 7 years have been collected and compiled and a volume of Research Abstracts has been published in the year 2010.

Other research reports published in the year 2010-11 and disseminated to educational institutions and State Project offices are :

- 1. Study of effectiveness of BRCs and CRCs in providing academic support and supervision to elementary schools
- 2. Study of Reasons of Large Decline in Enrolment Between classes I and II
- 3. Study of Deployment and Professional Competence of Para teachers in primary and upper primary schools
- 4. Study of Teachers' & Students' Time-on-Task in schools

### Providing guidance to states on their research programmes

Consultants from RESU visit states as and when required to participate in their Research Advisory Committees, to help in screening of research proposals, selection of agencies for conducting studies, reviewing their research work and assisting states in their capacity building programmes.