RESEARCH STUDY-1

SCHOOL EDUCATION COMMITTEE

The School Education Committee was set up by the Govt. of West Bengal through Notification No. 1693-S.E (S), School Education, and Secondary Branch dt. 20.9.2001). It was a 14-member committee; the Director of SCERT (WB) acted as the committee's Member-Secretary. The premises of SCERT served as the office of the committee.

The School Education Committee has highlighted the importance of SCERT (WB). In both its main report, submitted to the Government of West Bengal in December, 2002 and the supplementary report submitted in December 2003, the committee has made the following observations in the context of SCERT (WB):
The committee noted the following :

- SCERT may take up a time-bound program in collaboration with the WBBSE and the Institute of English, Calcutta to accomplish this task of scientific teaching of English as Second Language (Language Policy, Para 3.14 page 32).
- Production of educational software particularly in Bengali and regional Languages is a major challenge for meaningful IT enabled education which the academic community of West Bengal would be able to accept and with proper support provide solutions. State Level research institutions like the SCERT may be entrusted with the responsibilities of production of educational soft wares in Bengali and other regional languages relevant for the state (Computer Education, Para 4.8 (V), page 44).
- Effective Value education therefore requires revamping the total system of school education, which in turn calls for a continuous research support in all areas from curriculum planning, implementation strategies and evaluation. Institutions like SCERT should be geared up in a mission mode to support the Boards and Councils in the State to provide such support and constantly update the capacities of teachers through in-service training on the important research findings [Value Education & Health Education, Para 5(A) 7, page - 52].
- The Committee strongly feels that in performing both the task of original surveys (district level survey) and subsequent research. the SCERT can play a very big role provided this body is strengthened, following the committee's recommendations contained in chapter 8 (Para 6.12 page 71).

- The SCERT should have a cell for continuous assessment of the schools and storage of the data in computer. Is difficult and practically impossible to do this job manually. This will also help formulation of objective criteria for any subsequent committee". [Para 8(D). 1. page-97].
- If we want to give proper science education we must emphasize on the use of the mother tongue. We need good books and reading materials in Bengali and the other regional languages, which are used as media of instruction. SCERT should get seriously involved in the preparation of these books, which should be both informative and attractive -----this is true even for computer education ---- All the instructions should be in the mother tongue ---- SCERT can set up a team of experts for production of this software [Para 8(G). 2. Page 100].
- Coping with these tasks, essential for quality education, requires regular survey, research, training and orientation not only of teachers but of other functionaries as well. It is precisely to meet this challenge that the State Council of Educational Research & Training (SCERT) was set up more than two decades ago as a wing of the State Government and is still working with that status [Para 8(H) 1., page 101].
- The committee is convinced that for enhancing and maintaining quality of school education in its entirety, it is imperative to strengthen the SCERT. [Para 8 (H). 5, Page - 102].
- Granting of academic control of the emerging DIETs to the SCERT. (Para 8 (H). 5a, page - 103)
- Specifying the status of the SCERT and defining its role in relation to the implementation of major educational programs adopted from time to time at the National and State levels. [Para 8(H) 5.b, page - 103]
- The committee asserts the establishment of a strong network for planning organizing and evaluating TE programs as well as for sharing of resources is essential among the SCERT and PTTIs, DIETs, B.Ed. colleges, CTEs, IASE, University Departments of Education and autonomous Boards / Council in the State as well as with the National and International organizations.
- The Committee believes that a network of all such professional organizations in the state will facilitate formulation of policy in regard to design of Teacher education curriculum with need-based 'academic' and 'professional' components. This will also be useful in creating and maintaining a much needed data-base for preparing annual plan or perspective plan in Teacher Education in the State while determining priority areas for allocation of funds. [Para-8 (!) 3 page - 103].

- The committee feels that effective management of Teacher Education in all its aspects like planning, organizing and evaluating also requires strengthening the SCERT by setting up an Educational Management unit with adequate resources [Para - 8(1). 4 page - 104].

Observations in the Supplementary Report - Part A are as follows:

- **Life-style Education**: The SCERT (WB) may prepare guidebooks and conduct suitable orientation programs for the teachers" (page 27).WBBSE and SCERT may undertake training programmes of all teachers in the district in phases manner with the help of the K.R.P.s" (Para - 2, page - 42).

Some of the recommendations of the School Education Committee that were accepted and implemented upon by the State government were:-

i) Introduction of Lifestyle Education at the secondary level
ii) Setting up of the State Council of Vocational Education
iii) Reduction in the number of school holidays
iv) Abolition of the custom of publication of merit list of candidates in Madhyamik / Higher Secondary examination.

The tenure of the Committee was extended for one more year after its initial term expired on 31.12.2002. The Director and the research fellows conducted an achievement survey in several schools on behalf of the committee along with some of its members. The purpose of the Survey was to gauge the level of competency attained in Bengali and English by students at the end of class IV.

Question papers were set into two languages. The survey covered 36 schools of 8 districts of West Bengal and about 1900 students. A questionnaire was also designed to ascertain the various curricular and co-curricular inclinations of the students. The findings of the tests on the two languages and the responses to the questionnaire were tabulated the results were analyzed statistically and presented in the Supplementary Report of the Committee.

A workshop was organized on behalf of the committee during 9th to 11th June 2003 at Ballygunge Govt. High School to deliberate further on the recommendations of the Committee on various issues like Science Teaching, Life-style Education, Vocational Education, School Complex and School Session. Teachers from different recognized teachers' associations, teacher-educators and experts participated in the workshop. The Supplementary Report containing the recommendations of the workshop and result of the survey was submitted to the State Govt. on 17th March 2004**.**

RESEARCH STUDY-2

INITIATIVE UNDER EDUCATIONAL TECHNOLOGY

Published in: June, 2006
Available at: www.scertwestbengal.org

Since its inception, the Educational Technology Division of SCERT (WB) has attempted various approaches in West Bengal.

In 2003, SCERT (WB) organized three workshops in collaboration with All Iindia Radio, Kolkata to formulate the guidelines for educational broadcasts suitable for primary & upper primary classes.

In December, 2004, Hon'ble MIC, School & Madrasah Education, GoWB inaugurated the compilation of essays and report of the above mentioned workshops held by SCERT (WB), entitled "Shiksha Prasare Betar".

Other than this, SCERT provides All India Radio, Kolkata with a schedule of Radio lessons to be broadcast for classes VI to XII. The schedules are sent every three months on a regular basis. It influenced the quality of All India Radio, Kolkata's educational broadcasting programme "Vidyarthider Jonno".

Taking this cue, SCERT (WB) designed the project "Use of Radio in Teaching-Learning of English as second Language at the Primary and the Upper Primary levels in the state of West Bengal" for teacher's orientation under SSA programme for the year 2005-06.

The objectives of the project were –

- To develop radio lessons for the teachers in English Language learning and acquisition through the functional communicative approach.
- To popularize the English Language teaching through functional communicative approach.

The project initiated on 20.06.2005 and 21 radio aspects were broadcast on Mondays, Wednesdays and Fridays from 6th February'06 to 24th March'2006 from 9.30 – 9.45 p.m.

RESEARCH STUDY-3

TRACKING MANISTREAM STUDENTS ADMITTED IN GOVERNMENT & GOVERNMENT SPONSORED SCHOOLS OF WEST BENGAL THROUGH THE SYSTEM OF LOTTERY IN THE YEAR 1995

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Available at: www.scertwestbengal.org

Background:

The introduction of lottery as a method of admission raised the following questions among a section of guardians and teachers:

- Whether the students thus admitted are able to participate in the process of education followed in these institutions.
- As there was no upper age limit, complaints were coming from teaching community and also guardians regarding disparity in physical and mental maturity among students of different age- groups and the resultant problem of discipline.
- Often the students so admitted were found to commute a long distance for attending school. As a result, they were not getting enough time for studying.
- Some people apprehended that because the students thus admitted were heterogeneous in merit and social background, the system might cause degradation of the quality of these institutions.
- It was feared that the students admitted in class-I through lottery in 1995 would fare poorly in Madhyamik Pariksha held in 2005.
- The word 'Lottery' is derived from the word "Lot" which is synonymous to the world "Luck" and thus considered to be unscientific.
- The pre- primary education system was not taken into account while assuming that the students' mind in class-I is a "clean – slate".
- The system of admission through lottery has not been introduced as a general system of admission in Government –Aided schools as well.

These questions were tending to generate opinion against the lottery system of admission and the entire matter was gradually becoming a sensitive social issue, SCERT(WB) has felt the need for making an objective study of the process and has therefore taken up this project to examine the prevailing lottery system of admission in selected Government and Government Sponsored institutions and to seek answers to the above mentioned question in terms of a practice being followed for a decade in the state.

Objectives :

- To find out the present status of the students admitted in class-I through lottery in 1995.
- To compare the academic achievement of these students with that of children admitted through admission tests, taking result of Madhyamik Pariksha as the indicator.
- To identify the point where maximum number of students leave Government and Government Sponsored schools and to find out reasons thereof.

Methodology:

- Constitution of core group for the study.
- Development of format for collection of relevant information.
- Organization of workshop with the heads of different Govt. & Govt. Sponsored schools, where the system of lottery for admission to class- I was adopted in 1995, for finalization of the developed format.
- Out of 26 & 20 Govt. and Govt. Sponsored schools, 20 & 10 Govt. and Govt.sponsored schools respectively submitted filled-in format to SCERT (WB).
- This was followed by data scrutinization , tabulation and analysis for preparation of the final state report.

Findings:

1. 89% of the total number of students, admitted through lottery, completed the primary level in the same school
2. A sharp drop in the number of students was observed in class VI as only 70% of the students who completed class-V were promoted to class- VI.
3. The number of students, who discontinued studying in different classes in the same school, could not be ascertained.
4. The main reasons for students not staying in the same school were :
    i) Getting admission in nearby school.
    ii) Repetition in the same class/ failing to get promoted to the next higher class.
5. About 42% of the students, who were admitted through the system of lottery, appeared for the Madhyamik examination from the same school.
6. The results of these students in the Madhyamik examination indicate that it is comparable and in some cases, better than the results of the students (of the same school) who were admitted through admission tests or other procedures.

In India, the Right to Education Act, 2009, has come into force since 1st April, 2010. This Act states that every child of the age of six to fourteen years shall have a right to free and compulsory education in a neighbourhood school till completion of elementary education (CHAPTER II of THE RIGHT OF CHILDREN TO FREE AND COMPULSORY EDUCATION ACT, 2009). This would, therefore, entail doing away of the process of taking admission tests by the schools.

RESEARCH STUDY-4

IMPACT OF MID-DAY MEAL SCHEME IN PRIMARY SCHOOLS AND SSKS IN 5 DISTRICTS OF WEST BENGAL

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Available at: www.scertwestbengal.org

SCERT (WB) has carried out the study titled, "Impact of Mid-Day Meal Scheme in Primary schools and SSKs in 5 districts of West Bengal" as has been assigned by School Education Department, Government of West Bengal. The report contains opinions of different stakeholders like head teachers, guardians, community members and students on the impact of Mid Day Meal Scheme (MDMS).

OBJECTIVES:

- To study the efficacy of the MDM Scheme from the opinion of different stakeholders
- To study the impact of MDM Scheme on enrolment, retention, health status etc., of the students
- To study the impact of MDM Scheme on the learning level of the students

METHODOLOGY:

The impact study on MDM Scheme in primary schools and SSKs was carried out through DIETs under the overall supervision of SCERT (WB). Following broad methodology was adopted for conducting the study:

- Questionnaires for different target groups viz., head teachers, guardians, community members and students were prepared
- Surveys were conducted in 120 sampled primary schools including SSKs in five districts of West Bengal namely, Jalpaiguri, Malda, Murshidabad, Bankura and South 24 Parganas.
- A common data-entry format using MS-Access was developed for tabulation and analysis of the survey data.
- Reports as obtained from the surveyed districts were scrutinized, analysed and compiled and final state report was prepared.

MAJOR FINDINGS:

STRENGTHS:

- 85.5% of schools have set up MDMS Management Committees in their respective schools (including SSKs) for implementation of the MDM scheme.
- 89.5% of head teachers claim that students take mid-day meal in the school.
- 95.3% of head teachers say that students wash their hands before taking mid-day meal.

- 90.83 % of head teachers say that maximum emphasis is given on the nutritional aspect of the food while menu for MDM is decided.
- 93.8% head teachers say that varied and nutritious lunch menu is provided to the students.
- 60.5% of head teachers say that the students feel very happy and content after having the meal.
- 75.7% of head teachers have reported that enrolment of students has definitely increased as a result of the MDM scheme**.**
- 92.8% of head teachers say that there has been definitely a change in the attitude of children belonging to the economically disadvantaged section regarding regular school attendance following the implementation of MDM Scheme in the schools.
- 56.8% of head teachers reported that performance of students have improved after the introduction of MDMS.
- That teacher's involvement in MDM Scheme is not hampering the process of teaching–learning in schools is reported by 75% of head teachers.
- 80.8% of head teachers confirm that there has been improvement in the health of the students due to partaking of MDM.
- Parents/guardians do not have any complaints against MDMS as reported by 80% of head teachers

WEAKNESSES:

- 104 schools draw attention to the fact that fuel available for cooking is not sufficient.
- 72.7% of head teachers reported that food grain supply received by Primary schools and SSKs are of average quality.
- Only 75% of schools (including SSKs) receive the allotted food grains on time. Head teachers state that there are no safety measures in schools for keeping the food grains pest and moisture free.
- None of the surveyed schools have separate eating area for students.
- Provision of health supplements like Vitamin A, de-worming medicines etc., to the students is quite rare.
- Non-enrolled (under-age) children regularly come to school along with their elder siblings and have MDM as reported by 79.66% of head teachers.

A memo was issued by the Principal Secretary, School Education Department, Govt. of West Bengal to the District Magistrates of all the districts of West Bengal along with D.I/S (P.E) & D.I/S (S.E) regarding recommendations on MDM Scheme to be taken up in the schools on the basis of the impact study conducted by SCERT (WB).

RESEARCH STUDY-5

ACHIEVEMENT OF STUDENTS AT PRIMARY AND UPPER PRIMARY LEVELS VIS-À-VIS ATTENDANCE OF TEACHERS AND STUDENTS IN WEST BENGAL

Published on: 31 March, 2009
Available at: www.scertwestbengal.org

SCERT (WB) took up the study in 2008-09 as was desired by Paschim Banga Sarva Shiksha Mission.

OBJECTIVES:

- To assess the number and percentage of teachers remaining away from both primary and upper primary schools for different reasons.
- To find out the reasons for teachers remaining away from schools.
- To ascertain the percentage of students at both primary and upper primary levels remaining away from schools on a particular day.
- To study whether remaining away from schools by the teachers and students affects the learning achievement of the students.
- To study the effect of private tuition on the performance of the students, if any.

METHODOLOGY:

A host of in-house activities were conducted at SCERT (WB), like selection of blocks, selection of urban - 2 and urban – 1 schools using circular systematic sampling method, designing of the tools to be administered and the planning of the method of implementation of the study. The following draft tools were prepared by adapting the tools designed by EdCIL and NCERT at SCERT (WB):-

a) TA – 1, Schedule regarding infrastructure of schools
b) TA – 2, Schedule for collecting information regarding teachers
c) TA – 3, Schedule for recording attendance of teachers and students
d) SAQ – III, Achievement Test for students of class – III
e) SAQ – VIII, Achievement Test for students of class – VIII

In addition, PT - 1 schedule for collecting information from students about private tuition was also developed.

The survey was conducted in 400 schools (Primary-310, Upper Primary-90) in 17 districts of West Bengal. This emerged during the selection of blocks using the circular systematic method. DIETs conducted the survey in 15 districts, and in the remaining 2 districts, which do not have DIETs (Kolkata and Purba Medinipur), the study was conducted by the respective DPOs.

The data collected from all the districts were merged at SCERT (WB) according to the specifications of rural / urban areas and primary / upper primary schools.The merged data were organized, analysed and finally the state report was prepared by SCERT (WB).

MAJOR FINDINGS:

- **Reasons for teachers being absent or late** - In case of PRIMARY schools, the three major reasons for teachers being absent or late are family problems such as illness of a family member, health problem of the teacher, involvement in festivals and religious functions and great distance of residence from schools, in that order of percentage of respondents.
- The three major reasons that emerge for teachers of **rural UPPER PRIMARY** schools being absent or late are – health problem of the teacher, family problems such as illness of a family member and residence being far away from school. The two other minor reasons are participation in social activities and involvement in festivals / religious functions.
- The three major reasons that emerge for teachers of **urban UPPER PRIMARY** schools being absent or late are – health problem of the teacher, family problems such as illness of a family member and involvement in festivals / religious functions. The two other minor reasons are residence being far away from school and participation in social activities.
- The two major strategies that are adopted in PRIMARY schools when a teacher is absent on a particular day are – requesting another teacher to look after the class in addition to his / her own class (55%) and assignment of the class to some other teacher (35%), in that order of preference.
- The two major strategies adopted in UPPER PRIMARY schools to tackle the problem of a teacher being absent in schools are - assignment of the class to some other teacher (75%) and requesting another teacher to look after the class in addition to his / her own class (22%), in that order of preference.
- **Distance of teachers' residences from their schools -** 32% of teachers teaching in RURAL PRIMARY schools reside within 1 km. of their schools and in all 64% of the teachers of these schools live within 5 km. of the schools they serve. 42% of the teachers of URBAN PRIMARY schools have their homes within 1 km. of their schools and overall 79% of these schools dwell within 5 kms. of their schools.

  As for UPPER PRIMARY schools, as many as 41% of the teachers in rural schools live at a distance of 10 km. or more. 29% of teachers in urban upper primary schools stay within 1 km. of their schools.
- **Activities of teachers during an academic session –** In 2007-08, the average numbers of working days in rural and urban PRIMARY schools were 244 and 242 respectively, while those for rural and urban UPPER PRIMARY schools are 236 and 242 respectively. On an average, the teachers are absent for 10-11 days per year in PRIMARY schools, whereas in UPPER PRIMARY schools, the average number of days of absence comes out to be 14 per year. The

teachers of PRIMARY schools spend on an average 6 days on trainings / meetings in BRC / CRC / CLRC / Block, while 2-3 days on an average are spent by UPPER PRIMARY teachers in this activity. The trainings take place usually on working days. A negligible percentage of respondents stated that they have attended training programmes during vacations. Teachers of PRIMARY and RURAL UPPER PRIMARY spend 5 hours on an average per week on administrative work.

- **Activities of teachers on working days –** The average number of days spent in teaching related work by teachers of PRIMARY and UPPER PRIMARY schools is 196 and 173 respectively. On an average, 21 days in PRIMARY schools and 35 days in UPPER PRIMARY schools are spent on examinations.
- **Attendance status of PRIMARY teachers** - In case of rural schools, the percentage of teachers who were actually present on the days of the visits, varies from 78% (second visit) to 85% (first visit). For urban schools the percentage of present teachers gradually decreases over the three visits (83%, 82%, 78%).
- **Attendance status of UPPER PRIMARY teachers -** In case of rural schools, the percentage of teachers who were actually present on the days of the visits, varies from 74% (second visit) to 77% (first visit). For urban schools, the percentage of present teachers gradually increased over the three visits (67%, 69%, 72%).
- **Teachers of primary schools engaged in classroom teaching -** The percentage of teachers actually engaged in classroom teaching is 62%-64% for RURAL schools and 55% - 64% for URBAN schools.
- **Teachers of upper primary schools engaged in classroom teaching -** The percentage of teachers actually engaged in classroom teaching is 58%-64% for RURAL schools and 44% - 61% for URBAN schools.
- **Status of enrolment in primary schools –** In RURAL primary schools, children belonging to SC / ST / OBC constitute almost 50% of the total enrolment. The percentage of minority children in these schools is in the range 22% - 24%. The gender gap is found to be 2% - 5%.

  In URBAN primary schools, children belonging to SC / ST / OBC constitute about 20% of the total enrolment. The gender gap is found to be upto 5%.
- **Status of enrolment in upper primary schools –** The enrolment of girls is higher in both rural and urban areas. In RURAL upper primary schools the enrolment of girls is higher by 9% -16%, and in URBAN upper primary schools girls' enrolment is 5% - 20% higher than that of boys.

  In RURAL upper primary schools, children belonging to SC / ST / OBC categories constitute 40% - 50% of the total enrolment. The percentage of minority children in these schools is about 20%. In URBAN primary schools, children belonging to SC / ST / OBC categories constitute about 29% - 35% of the total enrolment.
- **Status of attendance in primary schools –** It is observed that 73%, 75% and 77% of enrolled students were present on the three dates of visits in the surveyed primary schools.

- **Status of attendance in upper primary schools –** It is seen that 71% of enrolled students were present in the surveyed upper primary schools on the date of first visit. The corresponding figures on both second and third visits were found to be 67%.
- **Achievement** of class - III students from rural areas is comparatively better in Language and Mathematics than that of students from urban areas.
- Urban students of class- VIII have performed better in Language, Mathematics, Science and Social Science than students of same class from rural areas.
- The overall achievement of class III students in both rural and urban areas is significantly better than that of students of class VIII.
- Percentage of attendance of class III students is also found to be higher than that of class VIII students.
- No significant correlation (linear) was observed between Achievement and Attendance (till the day of Achievement test) of the students of both classes III and VIII.
- **Students receiving private tuition -** At the PRIMARY level, 71% of students of both rural and urban areas say that they are provided private tuition. As for students of UPPER PRIMARY level, 82% - 85% of students in both rural and urban areas say that they are helped in their studies by private tutors
- **Reasons for not receiving help from parents -** Students who stated that they do not receive help from their parents in studies cited illiteracy of parents and them being busy in their occupations as the main reasons for the parents not being able to help their wards in studies.
- **Subjects in which private tuition is received -** 94% - 96% students of RURAL PRIMARY schools receive private tuition in Bengali, English and Mathematics. 97% - 100% of URBAN PRIMARY students are provided private tuition in History and Geography along with Bengali, English and Mathematics.

  As for UPPER PRIMARY students, maximum percentages (98%) of rural students receive private tuition in Mathematics, while 96% and 93% of the urban students are taught English and Mathematics respectively by private tutors.
- **Reason(s) for liking the way of teaching of private tutors** - The main reasons that emerged were - a) the private tutors teach in the language and the method suitable for the students b) tutors prepare the students for their examinations.

RESEARCH STUDY-6

STUDY OF REASONS OF LARGE DECLINE IN ENROLMENT BETWEEN CLASSES I & II

The Joint Secretary, Ministry of Human Resource Development (MHRD), Government of India (GoI) desired that a *Study of Reasons of Large Decline in Enrolment Between Classes I & II* would be conducted by GoI in four states – viz. Assam, Bihar, Mizoram and West Bengal. Accordingly, Dr. Rathindranath De, Director, SCERT (WB) was nominated as the State Coordinator for the said study by the School Education Deptt, GoWB on 27.07.2006.

Considering various factors, EdCIL had selected two districts of each state for this study. In West Bengal those are Jalpaiguri & South 24-Parganas. The database of DISE was used to identify the districts, which fulfill some predetermined criteria.

Data have been collected both from schools as well as from households. The strategy involved child-tracking approach in the case of children who were in Class I of the school in 2006 but were no longer in the school in 2007.

The Field Investigators (F.I.) from both the districts of West Bengal were oriented in process of the survey at SCERT (WB) collaboratively by SCERT (WB) and EdCIL on 14-16 November, 2007. Prof. ABL Srivastava, Chief Consultant, and Dr. R.R.Saxena, from Technical Support Group, EdCIL lent their support in orienting the F.I. at SCERT (WB). The state specific report for West Bengal was submitted to EdCIL in 2008 for their onward compilation.

Objectives of the study:

(i) To find out the reasons of sharp decline in enrolment between classes I and II and to assess how much of the decline is due to genuine dropping out.

(ii) To estimate the percentage of under-age children in class I and to find out how many of them dropout or get promoted or repeat the class.

(iii) To estimate the percentage of children who repeat class I or II but are treated as new entrants.

(iv) To suggest measures for reducing the decline in enrolment from class I to class II and change in data collection and reporting strategies for assessment of genuine dropout rate and to recommend steps for cleaning of the enrolment data presently collected through DISE.

Findings of SCERT (WB) Study:

- It is found that the decline is more prominent for certain section of the society; hence Equity related issues are to be addressed for betterment in primary schools.

- A considerable portion of the students enrolled in class I in the sampled schools are not promoted in class II, which is a cause of concern in terms of the quality of education in the primary schools.
- That 14.57% of the children who have dropped out, were found not interested in studies, calls for further measures to address the quality issues in education at the primary level.
- Parents of a large number of children insist that the child be retained in Class-I, as have been reported by the teachers during the study. In some cases it has been found that the school readmits students in class-I with the pervious year's Admission Number. It, therefore, appears that the schools may be allowed to retain some children (who may be underage) in a separate section in the school for school readiness programme which may be termed as Pre-Primary Section.
- The DISE data collection format needs to be corrected as per the preceding conclusion.
- The study result necessitates data correction in DISE by inclusion of Pre-primary section.
- The schools need to be more accurate in keeping the Admission and Attendance Registers, and the VEC/Community should supervise.
- The percentage of students joining SSKs is 66.37 in South 24-Parganas and 28.67 in Jalpaiguri. Although none of the boys in the sampled schools of Jalpaiguri shifted to SSKs but 70.86% of the boys in South 24-Parganas did so. The facts that:-

  (i) The SSKs and schools in Jalpaiguri district are evenly distributed throughout the district, and these are so located that any one of these can only be accessed easily by a student;

  (ii) The SSKs are run by female teachers, whereas this study reveals that there is a dearth of female teachers in the Primary schools, may have a bearing on the observations made in this study. This requires further studies on the trend of students shifting to SSKs. These migrating students from regular schools to SSKs in Class-I cause a further dip in Class-II enrollment.
- As found in the study the decline is to a great extent due to the repeaters who often are underage and many are not interested in school activities as well. Appropriate district-specific strategies may be necessary for these issues.

Conclusion:

Article 3.1, Chapter II of RTE Act directs, "Every child of the age six to fourteen years shall have a right to free and compulsory education in a neighbourhood school till completion of elementary education". In the light of this the field level strategies have to be evolved to bring back the dropped out and the never enrolled children within the ambit of the school, this is where the present study becomes relevant. The SCERT (WB) study also points out to the fact that an integrated and sustainable planning has to be designed to address multifarious socio-economic issues like, poverty, child-labour, infrastructure, access and equity.

RESEARCH STUDY-7

A STUDY OF SCERT (WB) ON ACHIEVEMENT OF CLASS III CHILDREN IN JALPAIGURI & PURULIA VIS-À-VIS THE OBSERVATIONS MADE IN ASER 2007

- In ASER'07, 720397 children were surveyed. In West Bengal, 17 districts, 487 villages and 9842 households were surveyed in ASER'07.

- In the age group of 6-14 years, 13959 children have been surveyed in West Bengal

In ASER 2007, the district wise distribution of percentage of out-of-school children aged 6-14 years has been shown to be below 20% in Purulia district and below 3% in Jalpaiguri district.

The district-wise distribution of percentage of standard I and II children, who can read letter or more in Bengali has been shown 64.5% in the district of Jalpaiguri and 68% in Purulia

Observation of SCERT on Data Collection in **ASER '07**

- No students of the school were tested on their achievements inside the school and neither were the children required to write their responses, except for testing two operations in Arithmetic, viz. Subtraction and Division.
- Instead, the surveyors of ASER'07 collected the responses of children from their verbal communications. This data collection process is described in ASER – 2007 (Provisional) Report, dated 16.1.2007 (Pages 21-27, 101)

Sampling Procedure in SCERT (WB) Study

- A representative sample of 30 Gram Panchayet (G.P.) in each of the two districts had been selected using simple random sampling (SRS). One government/government-aided school had been selected using SRS in each GP. Ten students of class III had been selected using SRS on whom the tests were to be administered.
- To find out the number of out of school children in both the districts, information were sought from the Child Register with the village education committee (VEC) which is located in the same Gram Sansad where the sampled school is located.
- To sum up, this study was conducted on a total 587 children from class III of 60 schools -30 each form Jalpaiguri & Purulia district. In addition, responses were recorded form 30 VEC members of each district.

There were two tools used in this survey: -

- Achievement test booklet for Class III on Language & Arithmetic
- Village Education Committee Questionnaire (VECQ)

The first tool was developed adapting standard tools devolved by NECRT for its Mid-Term Achievement survey, 2007.This tool contain 50 test item-25 belonging to Language and the other 25 belonging to Arithmetic – each carried 1 mark .The test paper was of 1 hour 30 minute duration. The competencies of Class III, in both Language and Arithmetic, were kept in view, for designing this tool. The text passage in this tool used for item no 21 to 25 was also used in testing the comprehension of each child. The responses have been recorded in the response sheet design by SCERT(WB).

Comparison of data and analysis: Performance of Districts in ASER'07

Sl no	District	%Children (6-14) out-of-School	% Children (6-14) Pvt. School	Std. 3 : Learning Level	
				%Children (Std. III-V) who can read (Std. I) text or more in own Language	% Children (Std. 3-5) who can Subtract or do more
1	Jalpaiguri	2.5	10.2	57.5	66.6
2	Purulia	15.6	1.3	56.9	60.6

No. of Students taking the Achievement Test (District wise) in SCERT Study

Purulia	Jalpaiguri	Over all
291	296	587

Results of Achievement Test (District wise) conducted in SCERT Study

Purulia	Jalpaiguri	Over all
69.54	47.85	58.37

Overall Achievement of Arithmetic at Primary stage (District wise)

Purulia	Jalpaiguri	Over all
63.88	39.30	51.48

Overall Achievement of Language at Primary stage (District wise)

Purulia	Jalpaiguri	Over all
75.20	55.47	65.25

Overall Achievement of Reading Comprehension at Primary stage (District wise)

Purulia	Jalpaiguri	Over all
65.29	43.58	54.34

Overall Ability of Reading Comprehension at Primary stage (Category wise & District wise)

	Purulia	Jalpaiguri	Over all
Can read Fluently	131	78	209
Can read Haltingly	118	102	220
Can Not Read	42	116	158

Summary of Comparison of SCERT (WB) & ASER Reports

Sl No	Issue	Observations in SCERT report (Data collected in Nov 2008)	Observations in ASER' 07 report (Data collected in Oct-Nov 2007)
1	**Out of School Children**		
a.	**Jalpaiguri**	**4.05%**	**2.5 %**
b.	**Purulia**	**15.15 %**	**15.60 %**
2.	**Achievement of Children in class III in First Lang. (Bengali)**		
a.	**Overall % ability of reading comprehension (Total Score / Max. available Score)*100 (i.e. *Facility Value)* In JALPAIGURI**	**43.58 %**	**57.5%**
b.	**Overall % ability of reading comprehension (Total Score / Max. available Score)*100 (i.e. *Facility Value)* In PURULIA**	**65.29 %**	**56.9%**

3. Achievement of Children in Class III in Mathematics in

A. JALPAIGURI

a	**Ability to understand 3- digit numbers and can carry out simple operations with 3 digit numbers.**	**38.60 %**	**30.11 %**
b	**Ability to perform subtraction of 3 digit numbers**	**46.28 %**	**36.56 %**
c	**Ability to perform division of 3 digit numbers by 1 digit number**	**36.15 %**	**5.38 %**

B. PURULIA

Sl No	Issue	Observations in SCERT report (Data collected in Nov 2008)	Observations in ASER' 07 report (Data collected in Oct-Nov 2007)
a)	Ability to understand 3 digit numbers and can carry out simple operations with 3 digit numbers.	63.57 %	27.27 %
c)	Ability to perform subtraction of 3 digit numbers	72.85 %	27.27 %
e)	Ability to perform division of 3 digit numbers by 1 digit number	60.82 %	13.22 %

4. Ability to read aloud a paragraph from text

Jalpaiguri	26.0 %	9.68 %
Purulia	45.0 %	9.02 %

RESEARCH STUDY-8

STUDY ON IMPLICATIONS OF PRIVATE TUITION IN WEST BENGAL

Published on: 30 November, 2009
Available at: www.scertwestbengal.org

SCERT (WB) has carried out the study titled, "Implications of Private tuition in West Bengal" as has been assigned by School Education Department, Government of West Bengal. The report contains opinions of different stakeholders like head teachers, teachers, guardians, community members, private tutors and students on the implications of private tuition as well as a comparison of achievement of students with or without private tuition.

OBJECTIVES:

- To study the extent of spread of the private tuition,
- To study the reasons behind students taking private tuition
- To study the implications of private tuition from different angles

METHODOLOGY:

The target population included the Government, Government-Sponsored, Government-Aided and Local Body schools having Primary, Upper Primary & Secondary and Higher Secondary sections. The actual number of schools surveyed was 346 (Primary-240, Upper & Secondary-67, Higher Secondary-39) covering seventeen districts of West Bengal. Following broad methodology was adopted:

- Tools / questionnaires for different target groups viz., head teachers, teachers, guardians, community members, private tutors and students were prepared for this purpose.
- Opinions of nearly 10,000 respondents (viz., head teachers, teachers, guardians / parents, community members, private tutors and students) were collected from the sampled schools.
- Achievement scores of 4782 students from sampled schools of classes IV, VII, IX & XI have been analysed.
- Database was prepared using MS-Access. Structured Query Language (SQL) was used for data mining and preparation of secondary tables.

MAJOR FINDINGS:

Utilization of study hours

- Guardians / parents resort to providing private tuition so that their wards can make effective utilization of time outside the school hours. Head teachers perceive that extra coaching is sought for the wards by the guardians in order to ensure quality education for them.

Effectiveness of private tuition for students of all stages

- 83% of Primary, 88% of Secondary and 95% of Higher Secondary head teachers have stated that students take the help of private tuition.
- 52.7% guardians have opined that the extent to which students depend upon private tuition is higher at Madhyamik stage followed by that at Primary (23.2%), Upper Primary (11.4%) and Higher Secondary stages (7.3%).

Impact of private tuition on the classroom processes of the school and vice versa

- 52.12% rural and 61% urban surveyed **teachers** have stated that majority of the students like taking private tuition.
- 80.98% guardians said that school teachers give home-work to their children
- 94% of private tutors say that they help students in completing their home tasks.
- 80% of the respondent guardian state that private tuition has helped in improving the academic performance of their wards

Private tuition as an opportunity for earning livelihood by less educated youth / educated unemployed youth

- 95.3% of head teachers state that private tuition offers an opportunity to the unemployed youth to have part-time employment.
- 90.1% and 3.1% of the private tutors are unemployed and retired persons respectively. The practice of private tuition may be considered beneficial for the educated unemployed as it provides them with a means of subsistence.
- 46% of the private tutors possess lower educational qualifications, like persons who have studied up to Upper Primary, Secondary or Higher Secondary levels. Only 14% of the private tutors are professionally trained.
- From the opinion of the students**,** it is seen that the tendency of taking private tuition from school teachers gradually increases from Primary to Higher Secondary level while the tendency of taking private tuition from persons who are only tutors (not engaged in other profession) gradually decreases from Primary to Higher Secondary level although most of the students take private tuition from the latter category at all stages.

Impact of private tuition on high / average / low achievers

- As regards to the overall achievement of the surveyed students, it has been observed that 56.8% of them, who take tuition, are average and low achievers. It is also seen that 65.8% of students who do not take private tuition belong to the same category.

Cost of private tuition for students of low / middle / high income families

- Head teachers state that guardians / parents have to bear additional costs in order to provide private tuition to their wards. 76.3% of surveyed head teachers have stated that the practice of private tuition un-necessarily increases the hidden cost of education Again 67.3% of head teachers have also stated that investment on private tuition indirectly affects the nutritional status of children. However, for guardians who belong to high income society, investment in private tuition has
  become customary. Head teachers have also observed that guardians make gender preferences in providing private tuition to their children.

Reasons for taking private tuition

- Head teachers point out that due to insufficient number of teachers in the school, inability of guardians to provide additional academic support and for ensuring regularity in the study process at home, students are resorting to private tuition. Guardians on the other hand tend to focus on teaching in simpler language, ensuring better results in the examination by concentrating on probable questions as well as completion of the home-tasks as reasons for sending their wards to private tuition classes. Students mention that they need private tuition for doing home-tasks, for expressing their difficulties in understanding of the subject and for asking questions to the tutor. Many students have mentioned that there is none in the house who may help them with their studies. Private tutors on the other hand tend to concentrate more on preparation and scoring of high marks in the examination by the students.

The **Right to Education Act** passed recently in the Indian parliament also prohibits private tuition by schoolteachers. It states that, "No teacher shall engage himself or herself in private tuition or private teaching activity." (Clause 28, p.8 of *The Right of Children to Free and Compulsory Education Bill, 2009*)

RESEARCH STUDY-9

DEVELOPMENT OF SUPPLEMENTARY TEXT MATERIAL IN NATURAL SCIENCE FOR TRIBAL (SANTHALI) STUDENTS (GRADE – III) AND TO STUDY ITS SIGNIFICANCE IN SCHOOL ACHIEVEMENT

Supplementary text material published on: 31 March, 2008
Report published on: 31 March, 2010
Available at: www.scertwestbengal.org

Background

SCERT (WB) took up a project under SSA for assessing the challenges faced by Santhali students studying in Bengali medium primary schools of West Bengal, and to design a suitable intervention that would increase their participation in the teaching learning process.

Several documents such as EFA Global Monitoring Report 2008, NCF '05, report of the Kothari Commission, and National Policy of Educational (1986) recommend education in mother languages the tribal children in the early years and then gradually shifting to the widely practised regional language.

Keeping this in view, SCERT (WB) held several consultations in the three selected districts of Bankura, Birbhum and Purulia and conceived to design a bilingual supplementary text material in Natural Science for class- III Santhali students.

The bilingual supplementary text material was developed keeping in mind the recommendation of NCF'05 that the medium of instruction, as far as practicable, should be the child's home language. This would help the child in better understanding of concepts and improved attainment of competency (section 29 f of the RTE Act 2009). It was felt that such a bilingual material would help in overcoming the problems faced by the children due to difference in home language and school language.

Objectives

- Development of a supplementary **bilingual** text material in Natural Science and other relevant activities for tribal (Santhali) students of Grade – III.
- Study of the significance of these inputs on school achievement of such children whose home language differs from school language.
- Design of an appropriate pedagogical innovation.

Methodology

The bilingual supplementary text material was designed with its Bengali portion being based on the Natural Science textbook designed by the West Bengal Board of

Primary Education for students of class- III. Each page of the supplementary text materials had the Bengali portion, relevant illustrations, the Santhali translation of the Bengali portion (in Bengali Script) and appropriate evaluation items. Some pages of the materials could also be used as activity sheets where students were required to draw and label pictures or to write the answers of the evaluation items.

25 primary schools were selected from each of the 3 districts mentioned above. An extensive network was built up with the help of Chairmen of DPSCs and DIs (PE) of these districts. In the first phase of the project a baseline survey was carried out. Opinions of teachers were collected regarding the challenges faced by them in these areas and also the measures to be taken to overcome the problems.The marks obtained by the students in different scholastic subjects were collected and analyzed. An achievement test was also administered on the students.

In the second phase, the bilingual supplementary text material was published and distributed among all the Santhali students- III (about 900 in number) in the selected 75 schools of 3 districts. Pre- Intervention and post-intervention items were administrated. Marks obtained by the students in terminal examinations held before and after receiving the intervention were collected and analysed.

Results & Conclusion

The analysis of the results showed improvement of average achievement scores in post- intervention test as well in the performance of scholastic subjects held after the intervention in the form of the bilingual supplementary text material was provided, but there may be other factors involved which calls for a further in-depth study in future.

RESEARCH STUDY-10

TWO STUDIES TITLED "COMPARISON OF PERFORMANCE OF GOVT.-AIDED AND PRIVATE SCHOOLS AT THE PRIMARY STAGE IN WEST BENGAL" AND "STUDY ON EFFICACY OF DETENTION OF CHILDREN OF CLASSES VI, VII & VIII"

Published in : May 2010

Objectives:-

SCERT (WB) took up two studies in 2010-11 on a pilot basis under SSA. The objective of the **first study** titled 'Comparison of performance of Govt.-aided and private schools at the primary stage in West Bengal' was to ascertain the difference in infrastructure, management, performance etc. between Govt.-aided and private schools. The **second study** titled 'Study on efficacy of detention of children of classes VI, VII & VIII' aimed to assess the efficacy of detention in improving the performance of detained students.

Methodology:-

For carrying out these two studies, two Govt.-aided and two privately managed schools were selected. The medium of instruction of all the four schools was Bengali and all the schools were affiliated to the West Bengal Board of Secondary Education. The four schools were located in semi-urban areas. Both the Govt.-aided schools were boys' schools and the two private schools were coeducational.

Three tools were developed for collection of information and opinions from schools, students and guardians regarding the first study. A fourth tool was developed for collection of information from the schools about detained students (second study).

The pupils' questionnaire was administered on students of class V in all the schools. The guardians' questionnaire was administered on the guardians who were available on the day of the visit, notwithstanding the classes in which their wards studied. The schools provided information regarding infrastructure, management, performance of the students of class IV, school routine, etc.

Major Findings:-

- The Managing Committee of Govt.-Aided schools constitutes of the President, Secretary, Headmaster, representatives of teaching and non-teaching staff and guardians. In case of Private schools, the committee generally has three members of Education Society, Founder, Life members, three Guardian's representatives, Head of the institution, three Teacher's representatives, one PIE (person interested in education) and one Govt. nominee.

- The Student-Classroom Ratio (SCR) in Govt.-Aided schools (55% -69%) is higher in each of the classes (from V-X) than that in Private schools (38%-50%).
- The percentage of male teachers is much higher than that of the female teachers in Govt.-Aided schools. But the percentage of female teachers in Private schools is higher than that of male teachers.
- In case of Govt.-Aided schools, the percentage of trained graduate and Post graduate teachers are more or less equal, whereas the percentage of trained Post graduate teachers is much higher (71%) than that of trained graduate teachers in private schools (29%). The percentage of trained Post graduate teachers is higher in private schools than in Govt.-Aided schools (51.6%).
- In the Govt.-Aided schools, 5 to 6 teachers have undergone professional development, whereas only one teacher of one private school has undergone such training during the last academic year.
- In Govt.-Aided schools, the salary structure follows the Govt. norms, and is much higher compared to that of the Private schools. In one of the Private schools, the salary is fixed after negotiation with the teachers. Minimum salary of teachers in this school is Rs 4500/- and maximum is Rs 9875/-. In the other Private school, the range of salary is Rs3600/- to Rs 3900/-.
- One of the Govt.-Aided schools admits the children through admission test and other Govt.-Aided school admits the children directly. Both the surveyed Private schools admit children through admission tests. During the admission procedure, Govt.-Aided schools do not conduct interviews for the parents whereas both the Private schools interview the parents.
- Comparable percentages of students of both categories of schools have obtained 'A' & 'B' grades in the annual examination. More students of Govt.-Aided schools (12.5%) have obtained grade "D" in the annual examination than the students of Private schools (2.7%).
- Educational qualifications of parents (57% of fathers and 48% of mothers) of students of Govt.-Aided schools are below Madhyamik. In case of private schools, all the surveyed fathers and 62% of mothers are graduates.
- 80% of the families whose children study in Govt.-Aided schools have an average monthly income of less than Rs 5000/-. On the other hand, 70% of the families whose children are admitted to the Private schools have an average monthly income ranging between Rs. 10,000/- to Rs. 40,000/-.
- Greater percentage of parents (67%) whose children study in Govt.-Aided schools have one child whereas greater percentage of parents (60%) whose children study in Private schools have two children.
- The present study has revealed that the monthly school fees for Govt.-Aided schools is Rs. 28/- as against that of Rs. 400/- to Rs. 500/- per month in the Private schools.
- The amount spent by the parents of children in Private schools on private tuition is somewhat higher compared to that by parents of children of Govt.-Aided schools.
- The common reasons cited by parents for admitting their children to a particular school were – maintenance of discipline, good school environment,

caring teachers, proximity to residence, good academic performance in Madhyamik, etc. Many parents of children studying in Govt.-aided schools said that the issue of high school expense of private schools had deterred them from admitting their children to private schools.

- In case of Govt.-Aided schools, all the surveyed students of class-V have private tutors whereas for private schools, 75% of surveyed students (studying in the same class) have private tutors.
- The detention rate of students in classes VI, VII & VIII is lower in Private schools than in Govt.-Aided schools. In case of Govt.-Aided schools, the rate of detention for class VI students has decreased from 2005-06 to 2007-08. The detention rate has increased for class VIII students during the said academic sessions. But in case of class VII students, the rate has decreased from 2005-06 to 2006-07 and again increased in 2007-08.
- The percentage of detained students who have obtained more than 50% marks in First Language, Second Language and Mathematics at the end of second year is low.
- 38% to 68% of detained students of class – VI, 51% to 84% of detained students of class – VII and 52% to 80% of detained students of class - VIII in Govt.-Aided schools are promoted to the next higher class with less than 50% marks at the end of the second year. In case of private schools, all students in all the concerned classes, except for students of class – VIII in 2006-07, are promoted with less than 50% marks at the end of the second year.

The two studies were taken up on a pilot basis at SCERT (WB) so as to get a preliminary idea about the differences that may exist in the structure and function of Govt.-Aided and private schools, and the efficacy of detention. We have made an effort to formulate a process for carrying out the two studies. The studies may be conducted on a larger scale through the various district level functionaries after refinements (if necessary) in the process and the tools.

RESEARCH STUDY-11

DESIGN AND DEVELOPMENT OF HANDS-ON ACTIVITY BASED SCIENCE MATERIALS FOR
UPPER PRIMARY CLASSES

It has been assumed that 'learning by doing' is much more effective in teaching of a particular subject than the usual lecture method followed in schools. This is more applicable to Science subjects. If students are allowed to perform simple experiments on their own, it is expected that they will develop better understanding of the concepts entailed in the subject and find learning more joyful.

The NCF '05 has also raised a concern in the same direction and have suggested that appropriate strategies may be adopted by all stakeholders.

With this in view, SCERT (WB) took up a project under SSA since 2005-06 for design and development of materials that would promote activity-based Science teaching in upper primary classes. Many district level consultations were held with teachers and resource persons who designed activities in accordance with a format evolved at SCERT (WB).

After several revisions SCERT has developed three separate workbooks titled "Kajer Majhe Bigyan" for classes VI, VII and VIII on hands-on activities in Physical Science, Life Science, Geography and Environmental Science for students of upper primary level.

These activities are to be carried by the students themselves using low-cost, no cost materials. They will record their comments and questions on the activity sheets provided in the manual. The experiments are presented in the form of activity sheets to be filled in by the students. An evaluation sheet has been provided at the end of each activity book for recording the performance of students while carrying out the activities.

It was decided that the DPOs would print the activity books under Learning Enhancement Programme in sufficient numbers so that they reached all the students of classes VI, VII and VIII in West Bengal. Both Hindi and English versions of these workbooks are being prepared at SCERT.

The workbooks promote "learning through activities, discovery and exploration in a child-friendly and child-centred manner" (section 29 e of the RTE Act 2009) as the activities are to be done by the children themselves and in groups.

RESEARCH STUDY-12

ACTIVITY BASED MATHEMATICS TEACHING IN THE CLASSROOM AT UPPER PRIMARY LEVEL

Objectives :

1) To evolve a new method of making Mathematics teaching – learning through activity more meaningful and enjoyable.
2) To identify learning difficulties in Mathematics at Upper Primary levels
3) To suggest remedial measures.
4) To study the activities provided by students.
5) To study the extent to which students can ask questions.
6) To see whether the students can think of alternative activity

Action plan and strategy: The SSA Project proposed by SCERT on activity based teaching learning on Mathematics at the Upper Primary levels may b e considered as Action Research Programme of SCERT & DIETs. Through this project an attempt will be made to supplement the present curriculum practice in transaction of Mathematics in all Secondary Schools in West Bengal.

Learning by doing has remained an age-old wisdom but rarely practiced in classroom transactions in most of the schools. The NCF '05 has also raised a concern in the same direction and have suggested appropriate strategies may be adopted by all stakeholders.

The academic sub-committee of SCERT in several meetings has discussed the issue, several consultations were held at SCERT with representatives of the Boards, eminent teacher educators and practicing teachers of schools to give shape to the activity manual called "Kajer Madhyame Ganit". The manual was tried out in 30 upper primary schools in three districts. The suggestions arising in these try-out session will be scrutinized and incorporated in the final version of three separate work books for classes VI, VII & VIII.

SCERT (WB) have been published these work books titled "Kajer Madhyame Ganit". The CDs have been handed over to the DPOs who are to print and distribute these work books to all the students at the Upper Primary level. SCERT (WB) will provide necessary support to districts for Orientation of the teachers on this work book. Some DIETs will organise consultation with resource teachers to be identified from the block level institutions for further development of the workbook…

Expected out come in the light of NCF'05 and RTE Act,2009 :-

1. The work book promote learning through activities discovery and exploration in a child friendly and child centre manner (Section 29e of RTE Act) as the activities are to be done by children themselves and in groups.
2. These work books would help children to construct knowledge.

ACTIVITY-1

PREPARATION OF PRESPECTIVE PLAN ON TEACHER EDUCATION IN WEST BENGAL:

SCERT (WB) was entrusted with the responsibility of preparing the Perspective Plan on Teacher Education in West Bengal for Xth Five Year Plan in January 2004. The Plan prepared on behalf on the state was to be submitted to the Ministry of Human Resources Development, Government of India. A core committee was formed with a number of noted educationists in the field of Teacher Education to elaborate on the various aspects of the Plan. Two consultants were appointed to help the Director in preparing the Plan. SCERT (WB) initiated discussions with (a) different stakeholders of teacher education in the state, e.g.,
i) Presidents and Secretaries of West Bengal Boards of Primary Secondary and Madrasah Education, West Bengal Council of Higher Secondary Education.
ii) Chairman and Director of Rabindra Mukta Vidyalaya.
iii) Heads of the Departments of Education of different Universities.
iv) Principals of IASEs, CTEs, DIETs, a few B.Ed. Colleges and PTTIs.
v) Heads of a number of Primary, Secondary and Higher Secondary Schools and Madrasahs.
b) A number of distinguished national experts,
c) Renowned educationists of the state.

SCERT (WB) organized a two-day workshop on 28th and 29th June 2004 to consider the views and opinions of different stakeholders of the state as well as the scheme and data placed by them in the context of needs of teacher education as envisaged by them. The data were collected and incorporated in the draft Perspective Plan. The Plan after being examined thoroughly was submitted to the MHRD in September 2004. A team of MHRD representatives visited SCERT to gather some additional information regarding Teacher Education Institutions in the state on 5-7 January 2005. The Plan is now being appraised by MHRD.

SCERT (WB) undertook to prepare a documentary film on the Teacher Education Institutions of West Bengal. Besides, the work of writing a Status Report on the Institutions was started. Two consultants were appointed for two months. The academic consultant monitored the initial planning, design, layout etc. of the Status Report. The technical consultant helped in shooting the documentary. Visits were made to different such Institutions of the state by academic and supporting staff of SCERT (WB) over the months of February and March.

ACTIVITY-2

Activities of the Core Group on NCF'05 in West Bengal

As directed by NCERT and in terms of Government Gazette Notification No. 460-SE(Pry)/SCERT-7/05,dated 14.07.2006 and 534-SE(Pry)/SCERT-7/2005, dated 23.08.2006 a Core Group (C.G) was formed by the Govt. of West Bengal with the Director, SCERT (WB) as its Convenor and Prof. Ranju Gopal Mukherjee as its President to review the syllabi, textbooks and other related items relevant to the state of West Bengal, its concerned Boards/Councils based on National Curriculum Framework, 2005 and recommendation made thereon and make appropriate recommendations. The C.G. held several meeting starting from 5.9.2006 to 28.03.2007 in its way of finalizing its report, which was submitted to the SED, GoWB in April 2007.

The salient suggestions and views expressed by the *twenty two subject groups*, which were formed by the C.G. during its preparation of report, were collected through several workshops. Furthermore the Core Group decided to hold discussion on the issues related to teacher education emerging from the NCF05 document, at different places in reputed teacher education institutions in West Bengal, in which teachers from schools, general colleges, teacher education institutes and universities participated. Several hundred participants thus exchanged opinion on different dimensions of teacher education.

ACTIVITY-3

Developing Computer Aided Learning (CAL) lessons on selected topics in Upper Primary (Classes VI- VIII) syllabi, following WBBSE curriculum

Article 29.2(e), Chapter V, RTE Act states, "The academic authority, while laying down the curriculum and the evaluation procedure … shall take into consideration … learning through activities, discovery and exploration in a child friendly and child centred manner." The project of developing Computer Aided Learning (CAL) lessons by SCERT (WB) is in keeping to this view of RTE Act.

Objectives:

- The computers lying in the schools be utlised in regular classroom teaching-learning.
- Involvement of the teachers be ensured in the developmental process so that teachers may have ownership in the lessons produced.

Methodology:

- A MoU was signed in between SCERT (WB) and CDAC, Kolkata, whereby it was agreed upon that CDAC (K) will provide necessary technical support to SCERT (WB) for developing CAL lessons.
- Workshops with Teachers and Teacher Educators were held at SCERT (WB) and then in district level at the DIETs in West Bengal in which scripts, suitable for CAL lessons, have been developed.
- Subsequently, SCERT (WB) has developed exemplar CAL lessons, till date thirty-six in number, on chosen topics in Language, Science, Social Science and Mathematics from Upper Primary syllabi of WBBSE curriculum. These lessons have been integrated in CDs using 'Eklavya' template developed by CDAC, Kolkata

Process of Dissemination:

- The CAL lessons so developed have been placed to the State Project Director, PBSSM for subsequent distribution to the schools through the DPOs.
- Further to this, these CDs were replicated in requisite number and had been distributed to all the DPOs of our state, with a planning that the DPOs will make requisite number of copies of the CD and distribute them to the schools in the respective districts having computers in place for their onward use.

ACTIVITY-4

EDUSAT-linked Satellite Interactive Terminal (SIT)

An EDUSAT-linked Satellite Interactive Terminal (SIT) was installed at SCERT (WB) on 27.06.2006 under the national beam. Since then many orientation programmes / workshops have been conducted at SCERT in collaboration with CIET, NCERT. In the financial year 2009-2010 SCERT (WB) has organised two such workshops, - one, titled "Research Methodologies for ICT in Education through EDUSAT" for 5-7 October 2009 where 16 participating teacher educators / teachers contributed in developing research proposals. The other videoconferencing programme in workshop mode was conducted on Capacity Building of Teacher Educators for Promoting Inclusion of Children With Special Needs from 15-18 March, 2010.This programme was attended by nine Teacher Educators from the University, IASE, CTE and B.Ed colleges.

ACTIVITY- 5

Creation and maintenance of an electronic platform (PORTAL) for sharing of research information through interactive website at www.scertwestbengal.org

- SCERT (WB) launched its Portal in 2006 This website used to be a window to the activities taken up by SCERT (WB) and the DIETs, and also provided the online view of publications of SCERT(WB).
- The Portal used to provide an electronic platform to the teachers, teacher-educators, researchers and persons interested in education to express their views on emerging issues in school education.
- The Portal also used to provide a repository for all the publications and news updates of SCERT (WB)

Due to unavoidable reasons this Portal (**www.scertwestbengal.org)** was discontinued from April 2010. Presently efforts are on for launching of SCERT (WB) Portal afresh with the help of NIC.

ACTIVITY-6

Computer Aided Learning (CAL) Lessons Developed by SCERT (WB)

Sl.	Class VI Titles	Sl.	Class VII Titles	Sl.	Class VIII Titles
1	Types of Leaves	1	Rainfall	1	Religious Reforms in Europe
2	Prepositions	2	Electromagnetism	2	English Letter Writing
3	Root	3	Static Electricity	3	Gender (Beng. Grammar)
4	Air Pollution	4	Buoyancy	4	Number (Beng. Grammar)
5	Learning A Story	5	Bimetallic Strip	5	Current Electricity
6	Landforms, Latitude & Longitude	6	Reflection	6	Bengali Grammar
7	Point, Straight line & their Relationship	7	$(a + b)^2$ Formula	7	Classification of Rocks
8	Characteristics of Riverine Civilisation & Egyptian Civilisation	8	Noun	8	Transpiration
		9	Time & Tense		
		10	Article & Sentences		
		11	Light		
		12	High & Low Tides		
		13	'*Karak'* (Beng. Grammar)		
		14	Sentence Construction (Beng. Grammar)		
		15	Classification of Plants		
		16	Reproductory Parts of Plants		
		17	Ratio		
		18	Rotation		
		19	Quadrilateral		
		20	Time & Distance		

ACTIVITY-7

NATIONAL POPULATION EDUCATION PROJECT

The National Population Education Project being funded by the United Nations Fund for Population Activities (UNFPA) began in West Bengal in early 1984 through the NCERT. The Project was being implemented as an educational project for Human Resource Development from 1984 to 2002 in West Bengal at the Secondary and Higher Secondary stages. This programme acquired significance for attainment of better quality of life through School education.

The UNFPA funding for the project was stopped w.e.f 31.12.2002. The Project was then taken up by NCERT in 2003-2004 as a Centrally Sponsored Scheme titled "Quality Improvement in Schools". The major thrust areas of the Project in its reconceptualised form are:

i. Population and sustainable development
ii. Gender equality and empowerment of women
iii. Adolescence Education
iv. Family : Socio- cultural factors and quality of life
v. Health, Nutrition and Education: key determinants of population change
vi. Population, urbanization and migration

SCERT (WB) is the state level nodal agency for the implementation of this project. The project aims at inculcating values and developing different life skills in students so that they become responsible citizens of tomorrow. With this aim in view, the following activities have been carried out by SCERT (WB) –

1. **Celebration of World Population Day** on 11th July in which eminent educationists delivered erudite lectures in the different themes on Population Education and students of nearby schools delighted the audience with their performance based on these themes.
2. **Documentation of activities:** The activities under Population Education Awareness Programme-2006 were recorded and documented specifically in 100 selected schools and Madrasahs of two districts, namely Nadia and Malda. As a prelude to this, consultations were held at the DIETs of these two districts with Heads of Institutions and Resource Persons. To make the programme successful, the recognized teachers' organizations of the state were also involved.
3. **Publication of Materials for Teachers' Orientation:** SCERT (WB), under the aegis of the Advisory Board on NPEP, published a Teachers' Orientation Manual on Life-style Education in Bengali. The manual focused on the basic tenets of this education, the different life-skills and their development, especially among adolescents, through cocurricular activities.

4. **Publication of draft syllabus in Life Science:** The President, West Bengal Board of Secondary Education, requested SCERT (WB) to prepare a draft syllabus in Life Science by incorporating the relevant physiological discussions in the context of Life-style Education for classes VIII to X. Accordingly an Expert Committee comprised of school teachers, professors and representatives of WBBSE was formed which carefully went through the prescribed syllabus for the abovementioned classes and identified the specific entry points for their suggestions. The recommendations of the Expert Committee were forwarded to the Board for necessary action.
5. **Development, printing and circulation of Publicity Materials for Observing Population Education Awareness Programme:** In an effort to disseminate the concepts of Population Education through cocurricular activities with special emphasis on the themes of the project, SCERT (WB) took up a programme in all the secondary schools and Madrasahs of West Bengal. This programme was carried out in collaboration with West Bengal Board of Secondary Education and West Bengal Board of Madrasah Education. For this purpose, booklets in Bengali and English were published by SCERT (WB) containing some guidelines including topics for different activities like debate, essay writing, poster drawing, group discussion, role play etc. based on the six themes of Population Education. These were distributed in all the educational institutions through the offices of District Inspectors of School (Secondary). The Director of School Education, Govt. of West Bengal, issued necessary circulars to the DIs. A feedback form in the booklet was useful and indicated that many schools organized activities accordingly.
6. **Publication of journal:** The Advisory Board on NPEP activities proposed to publish a quarterly bilingual (in English and Bengali) journal. The journal named 'Pratyay' would contain erudite write-ups on the different aspects of Population Education by eminent persons in their respective fields. The NPEP Newsletter of SCERT (WB) would form a part of the journal. Five issues of this journal have been published by SCERT (WB) since 2005.
7. **Development of a teacher's training manual:** SCERT (WB) developed a teacher's training manual titled **"Janasampad Bishayak Shiksha**" after adapting, editing and translation of a draft manual developed by NCERT. SCERT has organised three one day advocacy / orientation programmes on this manual with district resource persons (DRPs) nominated by WBBSE, WBBME, PBRSSM, DPOs, DIETs in December 2009. With the help of DRPs district level teachers orientation programmes on this manual were organised in some districts.

ACTIVITY-8

NATIONAL ACHIEVEMENT SURVEYS

National Achievement Surveys (NAS) are surveys of the country, conducted by NCERT under SSA Project, based on learning achievement of children at Baseline, Midterm & Terminal stages at elementary level i.e., Classes III, V & VII/VIII. The surveys tend to highlights the health of education in the country particularly elementary education and at the same time it impounds to explain the learning differences based on family and institutional factors. The learning achievement covers all essential competencies/concepts taught in major curricular areas at various grade levels e.g., Mathematics, Environmental Studies and Languages.

During the initial stage of SSA the Baseline Achievement Survey (BAS) was conducted in the beginning of Classes III, V & VIII. After five years the Midterm Achievement Survey (MAS) was conducted again in Classes III, V & VIII. Finally as the close of SSA is drawing near, the Terminal Achievement Surveys (TAS) are being conducted. The activities under TAS at the end of Class V have recently been concluded in West Bengal. These surveys are conducted by SCERT (WB) in West Bengal since 2002, in collaboration with NCERT.

The performance of children studying in Classes III, V & VIII West Bengal in the Learning Achievement Surveys have been consistently within the top three states in India, ranking first in several occasions. An Analysis of Achievement Survey Result is enclosed for further reference.

All India Achievement Survey conducted by NCERT : An analysis of Results.

BAS – Base line Achievement Survey, MAS – Mid Term Achievement Survey , TAS – Terminal Achievement Survey

Sl. No.	Year	Number of States/UT	Total No. of Children covered (National)	Total No. of Children covered (West Bengal)	Subject	Level (At the end of)	Mean (%) Achievement (National)	Mean (%) Achievement (West Bengal)	Rank of West Bengal	Observation
1	2001	30(105 districts)(4 in WB Kolkata N-24 Parganas Purulia, Jalpaiguri) Survey was conducted in west bengal by WBBPE	88271	4739 2431 (Boys) 2304 (Girls) (196 Schools in WB)	Language, Mathematics EVS.	V (BAS)	58.87 46.51 50.30 Avg = 52.23	70.67 60.11 58.65 Avg= 63.14	3rd 3rd 5th	• Availability of workbook, TLM had + ve influence • only37%Training Programme were highly Programme were highly useful • % of Boys attending school on 90-100% days were

										less than the Girls • Reading comprehension of Urban Boys & Girls were better than Rural • Performance of other category was better than SC/ST • -ve association of PTR and achievement indicate more pupil in classroom enhance performance
2	2002	30 (105 district) Survey was conducted in West Bengal by SCERT and DI	1,01,066 (Students) 17,139 (Teacher) 4124 (Schools)	5577	Language, Mathematics, Science, Social-Science	VIII (BAS)	52.45 38.47 40.54 Avg. = 44.11	74.82 59.26 65.48 66.83 Avg = 66.60	1st 2nd 1st 1st	

3	2004	29 (3 districts in WB) (Murshidabad, Purulia, North 24-Parganas) Survey was conducted in West Bengal by PBRPSUS.	92407	3282 1665 (Boys) 1617 (Girls) 150 (Schools) 114 (Rural) 36 (Urban)	Language Mathematics	III (BAS)	63.12 58.25	68.36 62.02	6th 11th	• The % of teachers holding class X qualification was highest • Detention of Class III was 16% • 94.98% of the teachers were having essential professional qualification
4.	2006	33 (266 disrtricts) (10 in WB Coochbehar, Jalpaiguri,' Malda, Dakshin Dinajpur, N-24 Parganas Murshidabad, Nadia Hooghly Bankura Burdwan) Survey was conducted in	84322 (Students)	4066 (Students) 839 (Teacher) 284 (Schools)	Language, Mathematics EVS	V (MAS)	60.31 48.46 52.19 Avg = 53.65	69.27 61.02 59.92 Avg = 63.40	1st 1st 2nd	Mean difference (%) (MAS-BAS) For W.B.(63.40-63.14) =0.26%

		West Bengal by SCERT & DIETs								
5.	2008	18 (10 in WB Coochbehar, Jalpaiguri, Nalda, Dakshin Dinajpur N-24-Parganas Murshidabad, Nadia, Hooghly, Bankura, Burdwan) Survey was conducted in West Bengal by SCERT & DIETs		3311	Language Mathematics Science Social Science	VIII (MAS)	56.13 41.50 41.75 46.94 Avg= 46.58	62.74 45.08 53.04 51.88 Avg=53.18	2nd 3rd 2nd 2nd	Result as per NCERT communication Dated 28.08.08 Coochbehar has not yet been included in this result (Final result yet to be published by NCERT as on 30.6.10)
6.	2008	22 (10 in WB Coochbehar Jalpaiguri, Malda, Dakshin,Dinajpur, N-24-Parganas Murshidabad, Nadia,		3879	Language Mathematics	III (MAS)	78.15 69.19	67.84 61.89	2nd 2nd	Mean Difference (%) (MAS-BAS) National Lang 4.41 Math 2.67 West Bengal-Lang 9.56 Maths 7.49

		Hooghly, Bankura, Burdwan) Survey was conducted in West Bengal by SCERT & DIETs.								
Note :- NCERT expressed that in MAS 2008 in class- III West Bengal has shown appreciable improvement in achievement from BAS to MAS.										
7.	2010	The survey has been completed in 11 in WB Coochbehar Jalpaiguri, S-24 Parganas, N-24-Parganas Murshidabad, Nadia, Hooghly, Bankura, Burdwan, Howrah, Paschim Medinipur. Survey was conducted in West Bengal by SCERT & DIETs.			Language, Mathematics EVS	V (TAS)	-	-	-	# A Field Trial was conducted before this survey. In West Bengal the distrcts of Hooghly & North 24-Parganas were selected for Field Trials # NCERT is currently in the process of analysis for bringing out TAS report.