

E XECUTIVE SUMMARY

Primary education is intended to develop basic abilities in Reading, Writing, Arithmetic and Life skills, necessary for the children to acquire and be able to lead a good life. The acquisition of basic competencies in the domain of literacy and numeracy is more important than the competencies in other related areas. The class III being in the middle of Primary stage, assumes more significance from the point of knowing the level of achievement as well as learning difficulties for initiating mid-stage corrections so that students acquire essential competencies at the end of Primary stage. Therefore, a baseline study was planned with the objectives –

- To know the level of achievement of children in Language and Mathematics at the end of Class III.
- To know the variation in Achievement gender wise, area wise and across social groups.
- To know the contribution of intervening variables like home, school and teacher on students achievement.

This study was initiated in November 2003. The tools were developed and standardised in 2003 and the data was collected by administering these tools in the months of February-April 2004 in various States/UTs. The data was collected with the active participation of SCERTs/SIEs in most of states.

TOOLS DEVELOPMENT

The tools comprised of tests in Language and Mathematics and three questionnaires i.e. one each for school, teacher and student. Multiple parallel tests were developed in all Indian Languages in both subjects. These were tried out across 22 States/UTs. Each Language test had 35 objective type test items. The first 20 items were on Grammar & Usage generated in each regional language and remaining 15 items were on Reading Comprehension were simply translated. The Mathematics test contained items on– Number system, Four fundamental operations, Fractions, Geometrical figures, Measurement and problem solving questions etc. The common core competencies tested through these tests are essential for every grade three child across the nation. The questionnaires were developed to know the impact of other related variables on learning achievement of students.

SAMPLING DESIGN

Multistage stratified random sampling design was used for the selection of districts, areas, schools, teachers and students. A maximum of 10% districts and minimum of four districts were selected from each state and each UT was treated as one district. This survey was planned for 125 districts of the country. Two states (AP and Bihar) and four UTs (A&N Islands, Dadar and Nagar Haveli, Daman & Diu and Lakshadweep) could not participate. Therefore, data from 111 districts covering 29 states/UTs could be collected. In the actual sample, 92407 students were administered Language and Math tests in 5293 schools. The information from 8533 teachers teaching to sampled students in these schools was collected.

FINDINGS

The analysis of data was carried out using multiple regression technique. The analysis provided the profiles of schools, teachers and students. Further, the achievement of students areas wise, gender wise and category wise was also studied. The contribution of other home and school variables was also studied in detail. The findings in brief are summarised below –

PROFILES

- Percentage of multigrade teaching schools was highest (88.5%) in Uttarakhand and lowest (8.16%) in Chandigarh.
- Percentage of multigrade schools in rural areas was more in comparison to urban areas except Chandigarh, Delhi, Kerala and West Bengal.
- Percentage of inspected schools was the highest in Manipur (94.5%) and lowest in Meghalaya (19.89%).
- Percentage of regular teachers across the states varied from 53.49% (Sikkim) to 99.5% (Puducherry).
- The percentage of para teachers, was highest (28.68%) in Sikkim and lowest in Tripura (0.11%).
- Number of school working days varied from 190 days in Haryana to 244 days in Chandigarh. The overall average was 215 days.
- Most availed and used teaching aid in schools was chart.
- More than 50% teachers were using mainly teacher's guide, charts and flash cards 'Regularly' in their teaching.
- Less than three percent teachers were not using any kind of teaching aid.
- Mid-day meal scheme was better availed by students than other schemes.
- Incentive scheme like mid-day meal, free uniform, free textbooks, scholarships and others were better availed by rural students than urban students.
- VEC/AEC were found in more than 80% schools. PTA was in about 57% schools.
- Majority of teachers (approximately 85%) were possessing diploma/certificate in primary/elementary education, as an essential qualification while approximately 14% were having B.Ed degree and remaining (1%) were possessing M.Ed as professional qualifications.
- Percentage of female teachers possessing B.Ed and M.Ed degrees was more in comparison to male teachers.
- Percentage of teachers who studied language upto class X, XII and graduation was approximately 32%, 36% and 24% respectively.
- Approximately 65% teachers studied Mathematics upto class X, 15% percent upto +2 level and 4% upto graduation while remaining studied less than class X.
- Majority of teachers were possessing more than 10 years teaching experience.

- Evaluation practices like unit test, quarterly test, half yearly test and annual examination were in vogue in schools. Only 44% used all four type of tests.
- Approximately 77% mothers were housewives and 23% fathers were farmers.
- Approximately 3% fathers and less than 1% mothers were holding managerial/senior positions.
- Detention in Class III was slightly (10.70%) more in rural areas than urban areas (9.50%).
- Private/personal tuition was more prevalent in urban areas (32%) than rural areas (19%).
- Majority of the students attended school for 70-90% of working days.

ACHIEVEMENT IN LANGUAGE

- Mean achievement of students in Language was 63.12 %.
- Mizoram state students scored highest (82%) and Madhya Pradesh state students scored lowest (45%) in Language.
- Overall performance of students in 'Grammar & Usage' (68%) was better than Reading Comprehension (56%) in Language.
- Urban students performed significantly better than rural students in Grammar & Usage.
- Girls performed significantly better than boys in language
- Mean achievement of SC, ST and Others category students was 60.42%, 64.65% and 63.49 % respectively.
- Mean Achievement of urban students of all categories was more than rural students in Language and its components Grammar & Usage.
- In reading comprehension the mean achievement of urban SC and ST was more than rural students of same category but in case of others category students the trend was reverse.
- On comprehension items, less than 40% students of Chandigarh, Chhattisgarh and Madhya Pradesh could respond correctly.

ACHIEVEMENT IN MATHEMATICS

- Mean Achievement in Mathematics was 58%.
- The score of Manipur state was the highest (72.27%) whereas MP was the lowest (36.94%).
- Overall and in rural area boys performed significantly better than girls.
- The performance of urban girls was better than rural girls.
- Mean Achievement of Others category students was better than SC category students.
- Questions on 'addition' were responded correctly by maximum number of students (69%).
- Questions based on 'Money Problem' and 'Fractions' were responded correctly by less than 40% students in seven and five states respectively.

CONTRIBUTION OF INTERVENING VARIABLES

- The mean scores of students were higher in schools where the pupil teacher ratio was around 20.
- Mean achievement of students studying in non-multigrade schools was higher than the students studying in multigrade schools
- The higher professional qualification of teachers did not make much difference in the achievement of students in both subjects.
- The mean achievement of students studying in mother tongue was better than those studying in other languages in both subjects.
- Mean achievement of children of highly educated parents was better as compared to illiterate or less educated parents.
- The performance of students 'Getting help' from their family members was significantly better than students not getting help in their studies from family members.
- The mean achievement of Non-detained students was better than detained students.
- Mean achievement of students taking private tuition was better than those not taking tuition both in rural and urban areas.