

An assessment study to design an intervention model to address the underlying causes to the challenges for pupil attendance, retention and learning outcomes in Government Primary School of Sutamata and Haldia block of East Medinipur, West Bengal

Project supported by:TPCDT

Implemented by: Banipur Sahayog

Rationale of the study:

To ensure quality education and improvement of learning process, Banipur Sahayog with support from TPCDT has conducted an assessment study to design an intervention model to address the underlying causes to the challenges for pupil attendance, retention and learning outcomes, especially among marginalized sections like- scheduled castes, religious minorities and urban deprived of Sutahata and Haldia blocks of East Medinipur

Objectives of the study

- *Identify learning outcomes** (status) of children*
- *Identify key underlying causes or bottlenecks to the learning path*
- *Identify gaps in classroom delivery*
- *Understand the present perspectives of parents / guardians on children education*

****** learning outcome (functional definition): Skills in language and mathematics. Skills in language were assessed on the basis of ability to understand alphabets, simple words and text. The assessment was done through testing of skills in listening comprehension, ability for recognition of words and text and ability to read and write at age-appropriate level. Skill in mathematics included knowing and using numbers, learning and understanding the value of numbers, knowing key symbols, comparing and arranging objects and simple applications like addition, subtraction, multiplication and division at age-appropriate levels.

Methodology: Objectives and correspondent Methods to elicit desired outcomes

Study Objectives	Method Employed	Perceived Outcomes
A. Identify learning outcomes of children (listening, recognition, reading, writing, problem solving, creativity through tests in English, Bengali and Mathematics)**	<ol style="list-style-type: none"> 1.Oral Evaluation 2.Listening Comprehension Evaluation 3.Written Evaluation 	<ul style="list-style-type: none"> ➤ Identify current levels of class-based textual learning through achieved scores in English, Bengali, Mathematics (overall and gender disaggregated) ➤ Identify variations in performance based on skills – like listening, reading, writing, comprehension, computation, problem-solving, and creativity
B. Identify key underlying causes or bottlenecks to the learning path	<ol style="list-style-type: none"> 1. Classroom observation 2. Focus Group discussions with Children 3. Focus Group discussions with parents 	<ul style="list-style-type: none"> ➤ Identify gaps in teaching methodology from a pedagogical perspective ➤ Identify social and environmental issues that are undermining the learning process from both children's and adults' perspectives
C. Identify gaps in classroom delivery	<ol style="list-style-type: none"> 1.Classroom Observation 	<ul style="list-style-type: none"> ➤ Identify positive and negative aspects of classroom delivery
d. Consider perspectives of parents/guardians that can address intervention	<ol style="list-style-type: none"> 1.Focus Group discussions with parents 	<ul style="list-style-type: none"> ➤ Identify social and environmental issues that are undermining the learning process from both children's and adults' perspectives

Tools used to elicit desired information:

- *Test Sets for Classes I-V for English, Bengali and Mathematics*
- *Classroom Observation template*
- *Focus Group Discussion Guide for Children*
- *Focus Group Discussion Guide for Parents / Guardians*
- *In-depth interview guide for influencers*

Sampling and recruitment of study participants:

- *Both qualitative and quantitative techniques were employed*
- *The study involved participation of the Block authorities of the Education Department, Government of West Bengal to select the participating schools*
- *School authority recruited the study participants on the basis of their performance (good, medium, bad), so that a mix of outcomes may emerge*
- *The study has covered a sample of 25 government schools (20%) from two circles (administrative unit)*

Sampling and recruitment of study participants:

- *For the class-based oral and written evaluation procedure 3 students were selected for each subject (Bengali, English and Mathematics) in consultation with the teachers*
 - *Consequently, 9 students were selected from each class (I, II, III and IV) and 36 students from each school*
 - *A total of 900 students (36 Students*25 schools) as study participants*
- (Purposive sampling techniques is followed)*

Details of Study-Samples:

Sample Units	Number
1.Schools	25
2.Children taking oral and written evaluation	900
3.Children participating in focus-group discussions	41 (Number of Focus Group Discussions – 3, all girls, all boys, mixed)
4.Classes in session	24
5.Parents	16 (Number of Focus Group Discussions - 2)
6. Influencers	2 (Religious Leader, Teacher)

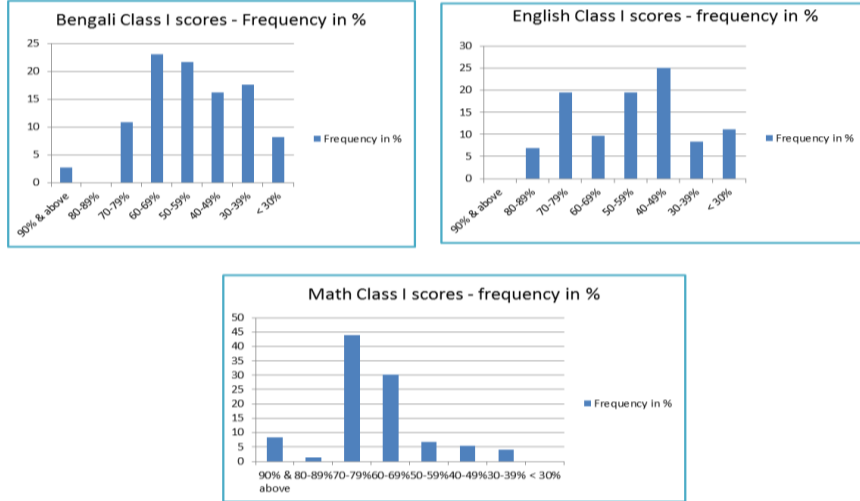
Findings:

Bengali					English					Mathematics				
Class/Beng	Av. Marks in %	Range in%	Lowest Marks in %	Highest Marks in %	Class/Eng	Av in %	Range in%	Lowest Marks in %	Highest Marks in %	Class/Beng	Av. Marks in %	Range in%	Lowest Marks in %	Highest Marks in %
Class I Beng	53	(26-90)%	26	90	Class I/Eng	53	(17-88)%	17	88	Class I Math	65	(30-100)%	30	100
Class II Beng	51	(19-85)%	19	85	Class II/Eng	49	(11-89)%	11	89	Class II Math	66	(17-100)%	17	100
Class III Beng	51	(13-96)%	13	96	Class III/Eng	44	(9-96)%	9	96	Class III Math	80	(0-100)%	0	100
Class IV Beng	48	(9-100)%	9	100	Class IV/Eng	50	(12-100)%	12	100	Class IV Math	59	(10-98)%	10	98

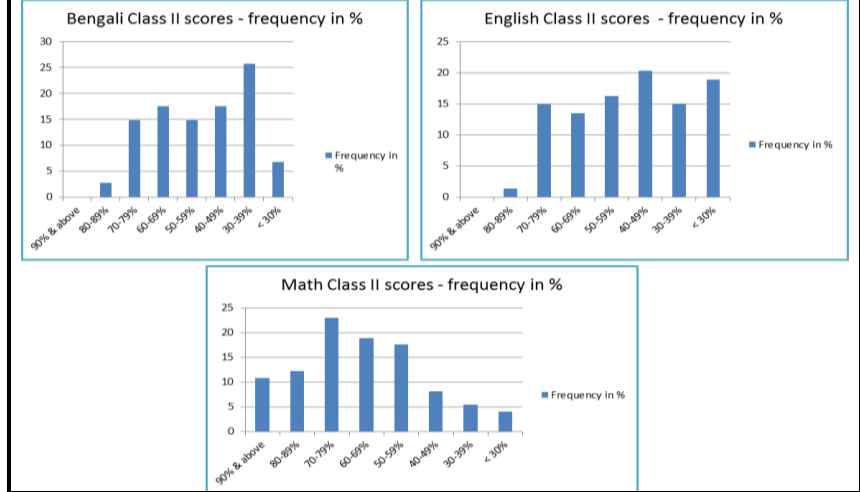
- **The average score for language across all classes was less than 60%.** Children had poorer language skills compared to numeracy skills
- Language and numeracy skill seemed to be deteriorating as children went to higher grades, **indicating the fact that many children are slowly deteriorating and their standards falling.**
- The **range of scores** across classes is very wide indicating a wide variation of learning levels within classes

Findings:

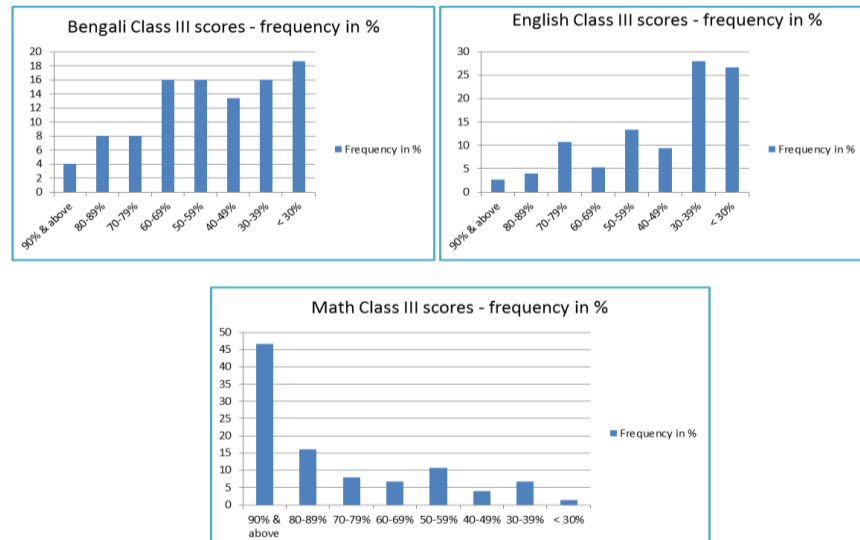
Overall Scores Class I : Bengali, English and Math



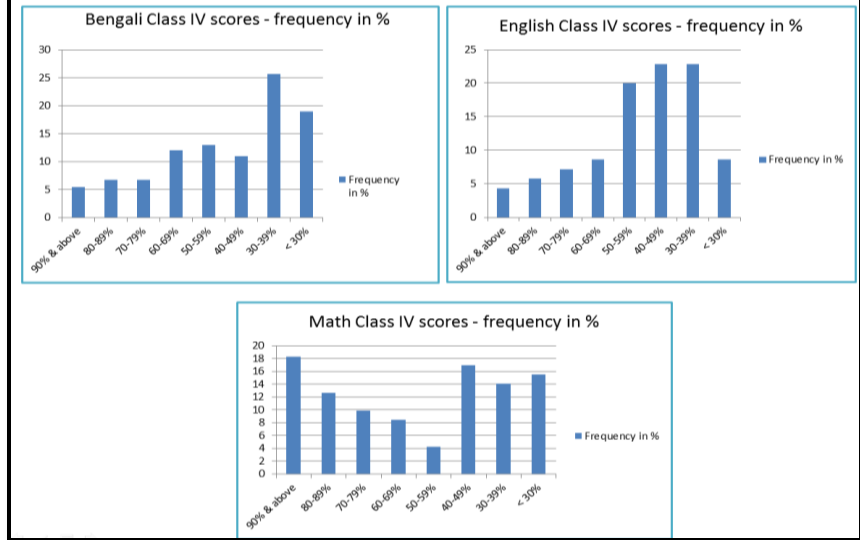
Overall Scores Class 2 : Bengali, English and Math



Overall Scores Class 3 : Bengali, English and Math



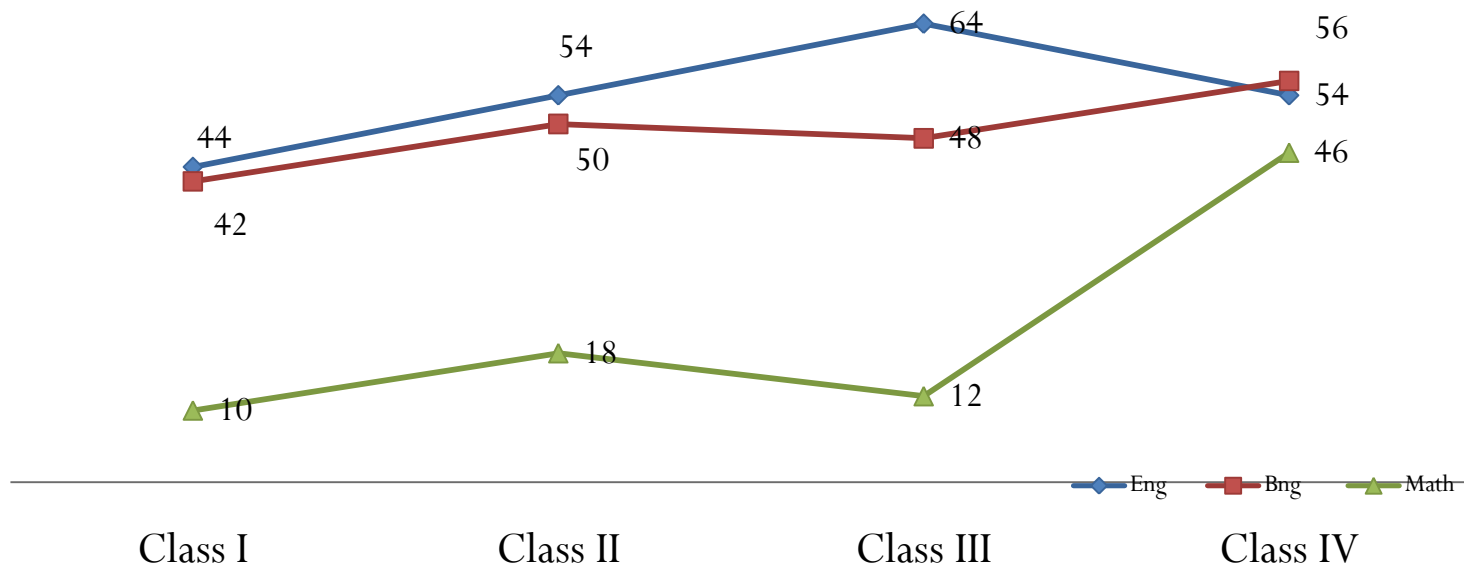
Overall Scores Class 4 : Bengali, English and Math



•The distribution of scores for each subject across classes further reveal the skewed pattern instead of a normal curve, indicating wide variation in learning level

Findings:

Frequency of vulnerable children (Ach. score <50% of marks)



- Children are slowly deteriorating as their standards go up, as in class IV for each subject almost 50 % of student seems to be weak as they score < 50 marks

Findings:

Performance in learning skills and gender-based outcomes:

Subject	Type of Skill tested through questions	Percentage marks achieved by modal group				Girls (G) performing better or Boys (B)?			
		Class 1	Class 2	Class 3	Class 4	Class 1	Class 2	Class 3	Class 4
Bengali	Reading (Voice, Fluency)	30	40	20	20	G	G	B/G	G
	Listening Comprehension	20	0	0	40	G	G	G	G
	Recognition (<i>Visual / Reading Comprehension / Vocabulary Knowledge</i>)	85	50	50	60	G	B	B/G	G
	Writing (<i>Memory, Application, Analytical, Evaluating, Creating</i>)	80	83	50	42	B/G	B	G	G

Bengali language skills:

- Performance in Reading and Listening is extremely poor across Classes I – IV (20-40%)
- Students are better at Recognition of letters and words through visuals, than they are in Reading and Listening Comprehension
- Students, particularly girls seem to be much more at ease with written questions that covers test application, analytical and creative skills
- However, achievement declines as children graduate to the higher classes

Findings:

Performance in learning skills and gender-based outcomes:

Subject	Type of Skill tested through questions	Percentage marks achieved by modal group				Girls (G) performing better or Boys (B)?			
		Class 1	Class 2	Class 3	Class 4	Class 1	Class 2	Class 3	Class 4
English									
	Reading (Voice, Fluency)	30	20	20	60	B / G	G	G	G
	Listening Comprehension	20	50	0	33	G	G	G	G
	Visual/Reading Comprehension	100	93	86	81	G	G	G	G
	Writing (<i>Memory, Application, Analytical, Evaluating, Creating</i>)	100	89	66	33	G	G	G	G

English language skill:

- Girls performed better than boys in the English language test too
- Reading and Listening skills are also poor
- Students seem to be more adept at visual/reading comprehension and Writing that include application-oriented questions.
- Here too achievement in writing has declined in Classes 3 and 4 vis-à-vis classes 1 and 2

Findings:

Performance in learning skills and gender-based outcomes:

Subject	Type of Skill tested through questions	Percentage marks achieved by modal group				Girls (G) performing better or Boys (B)?			
		Class 1	Class 2	Class 3	Class 4	Class 1	Class 2	Class 3	Class 4
Math									
	Numerics (<i>Number Name and Value</i>)	100				G			
	Application (<i>Computation - related</i>)		65				G		
	Problem-Solving			94				G	
	Problem-Solving (<i>Money, Measurement, Time</i>)				87				G

- In Mathematics too girls have performed better than boys. There is a sudden drop in achievement in Class 2, compared to classes 1, 3 and 4.
- Average percentages of marks achieved by the modal groups however are higher than in the languages. So numeracy skills are better among students than language skills.
- While problem-solving skills seem to be appropriate in classes 3 and 4, application skill is seemingly lacking in Class 2

Findings:

Out come of class observations:

Method followed:

- *Total 24 classes of English, Bengali and Mathematics were observed*
- *Six classes of Classes 1 and 3, Eight classes of Class 2 and Four classes of Class 4 were observed.*
- *Majority (22) of the classes observed were ‘Teaching Classes,’ implying that, some lesson was being taught in the class when the class was observed*
- *Two of the classes were revision classes.*
- *The outcomes were recorded on a standard template*

Findings: *Out come of class observations*

Class observation parameters	No. of classes observed in (out of 24)
▪ The Teacher follows a written Lesson Plan	1
▪ Teacher talking most of the time	17
▪ Children and Teacher are conversing	2
▪ Children are focused	17
▪ Teacher is the only one asking questions	15
▪ Both Teacher and Children are asking questions	9
▪ Children are being called to present/say something in front of the class	13
▪ Teacher is writing on the board most of the time	17
▪ Teacher is asking children to copy whatever she is writing on the board most of the time	16
▪ Children are writing continuously while teacher dictates	17
▪ Teacher uses aid other than Text Book and Black board	14
▪ Children are using aid other than Text book, Copies and Black board	5
▪ Classroom has displays of Teacher and Student work in the subject	4
▪ Corridor has displays of Teacher and Student work in the subject	5

Findings:

Out-come of focus group discussions with children

- Mostly children did not like to go to school.
- Even when they did so, it was more to play with classmates.
- Children only liked those teachers who tell them stories and they can have fun while learning in the classrooms.
- Majority of children recalled play-time in school as opposed to study-time.
- Children observed that many teachers (in few schools) were not regular and are absent most of the time

Findings: *Out-come of focus group discussions with Parents*

- Parents are concerned about teacher absenteeism and irregularity of classes.
- All most all the parents felt that the education given in schools was not enough and one needed to appoint a Tuition teacher for revision at home.
- Many parents felt that a) they were either not capable or b) did not have the time to sit with their wards' studies at home.
- Majority of the parents went to their wards' schools only on special occasions and when they were called to collect results
- Some parents went to their wards' schools to check whether mid-day meal was being served.
- There was no discrimination observed in terms of caste, class or religious affiliation.

Learning Environment & Children Performance

Not capable or did not have
Parents
the time to sit with their
wards' studies at home

• 1 out of 24 follows a written Lesson Plan
• 9 out of 24 situations- both Teacher and
Children are asking questions

Teacher / class-room
• 17 out of 24 situation Children are writing
continuously while teacher dictates
• 14 out of 24 situation, teacher uses
aid other than Text Book and
Black board

Children Performance in Study:

- Performance in language, specially for Reading and Listening is extremely poor across Classes I – IV
- Children are slowly deteriorating as their standards go up, as in class IV for each subject almost 50 % of student seems to be weak as they score < 50 marks
- Girls performed better than boys
- Majority of children recalled play-time in school as opposed to study-time
- For numeracy skill, average percentages of marks achieved by the modal groups however are higher than in the languages

Recommendation:

- Targeted intervention require to achieve in improvement in student performance in the primary classes. Particularly, children's performance in Reading, Listening Comprehension and Application oriented mathematics
- The deterioration of standards as one went up to higher classes was quite alarming, since this is usually considered as a precursor to dropping out from middle-school. Teachers should be informed and sensitise on the issue
- The classroom observations also revealed many gaps in classroom teaching and exposed a 'chalk and talk' environment. Targeted intervention would need to improvement of the teaching and learning environment
- **The study suggested a strategic intervention with a two-pronged approach**

Recommendation:

1

Strategic interventions to improve learning outcomes in Language and Numeracy at the Primary level

Direct Intervention to address skill gaps

School-based activities with students (Reading-Writing and creative sessions)

Developing Capacity of Teachers

Training Sessions, Consultations and Workshops with teachers

Recommendation:

2

