

# NAS 2017

## NATIONAL ACHIEVEMENT SURVEY

Class : 3, 5 and 8

# TRIPURA

## State Learning Report

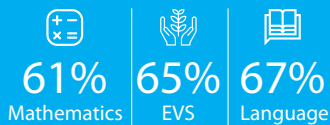


The National Achievement Survey (NAS) was conducted throughout the country on November 13, 2017 for Classes 3, 5 and 8 in government and government aided schools. The survey tools used multiple test booklets with 45 questions in Classes III and V and 60 questions in Class VIII in Mathematics, Language, Sciences and Social Sciences. The competency based test questions developed, reflected the Learning Outcomes developed by the NCERT which were recently incorporated in the RTE Act by the Government of India. Along with the test items, questionnaires pertaining to students, teachers and schools were also used.

The learning levels of 2.2 million students from 1,10,000 schools across 701 districts in all 36 States/UTs were assessed. The findings of the survey, will help guide education policy, planning and implementation at national, state, district and classroom levels for improving learning levels of children and bringing about qualitative improvements.

# HIGHLIGHTS

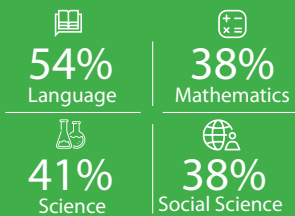
**In Class 3**, on an average, the correct responses to the subjects were as follows:



**In Class 5**, on an average, the correct responses to the subjects were as follows:



**In Class 8**, on an average, the correct responses to the subjects were as follows:



85%

Children could understand what the teacher says in the classroom.



31%

of the school buildings need significant repair.

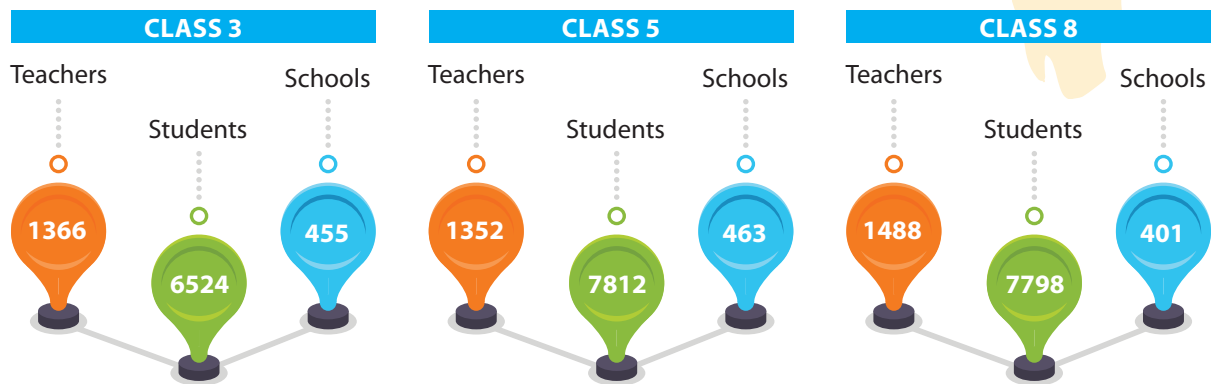
## Highest Performing Learning Outcomes

- **E504:** Explains the role and functions of different institutions in daily life (Bank, Panchayat, cooperatives, police station, etc.) (70)
- **E307:** Groups objects, birds, animals, features, activities according to differences/similarities using different senses. (e.g. appearance/place of living/food/movement/likes-dislikes/ any other features) (71)
- **E314:** Voices opinion on good/bad touch, stereotypes for tasks/play/food in family w.r.t gender, misuse/wastage of food and water in family and school (73)
- **M309:** Identifies and makes 2D-shapes by paper folding, paper cutting on the dot grid, using straight lines etc. (75)
- **M319:** Records data using tally marks, represents pictorially and draws conclusions (78)

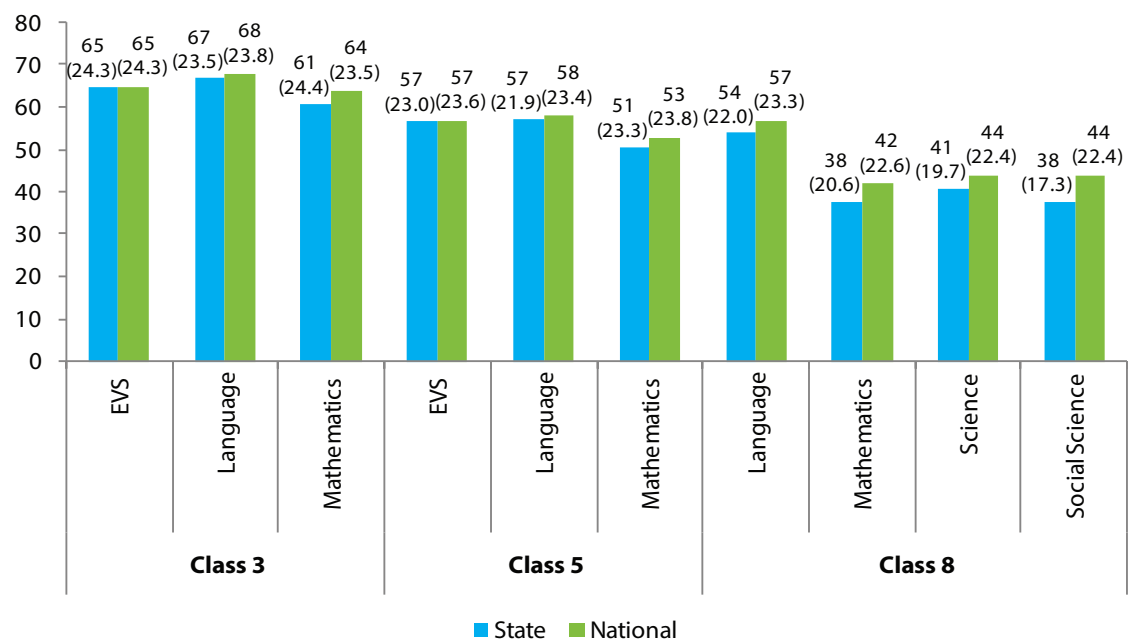
## Lowest Performing Learning Outcomes

- **SST610:** Locates important historical sites, places on an outline map of India (19)
- **SST605:** Identifies latitudes and longitudes, e.g., poles, equator, tropics, States/UTs of India and other neighbouring countries on globe and the world map (20)
- **SST816:** Analyses the decline of pre-existing urban centers and handicraft industries and the development of new urban centers and industries in India during the colonial period (21)
- **M710:** Solves problems related to conversion of percentage to fraction and decimal and vice versa (24)
- **SST823:** Applies the knowledge of the Fundamental Rights to find out about their violation, protection and promotion in a given situation (24)

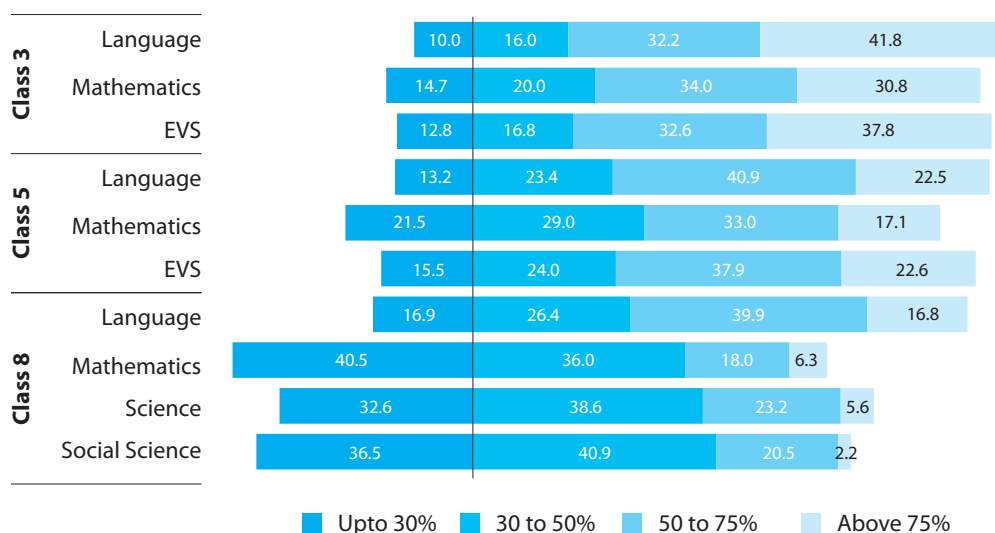
## Participation



## Average Achievement by Classes and Subjects



## Distribution of Students Achievement by Classes and Subjects

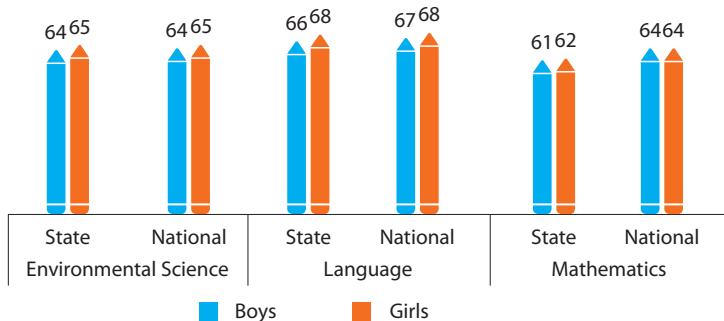


E.g. In Class 3 language, percentage of students achieving upto 30% is 10.0, between 30%-50% is 16.0, between 50%-75% is 32.2 and above 75% is 41.8.

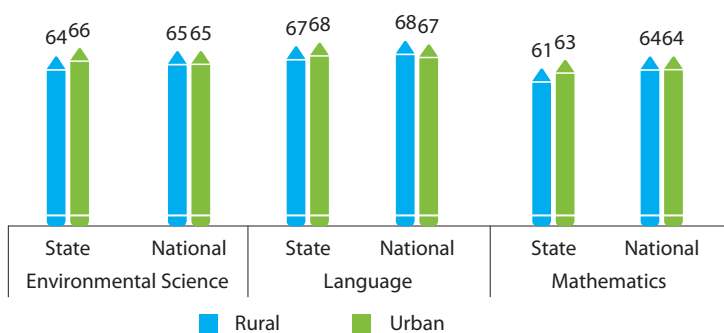
## Class 3 State Results by Student Groups

### PERFORMANCE

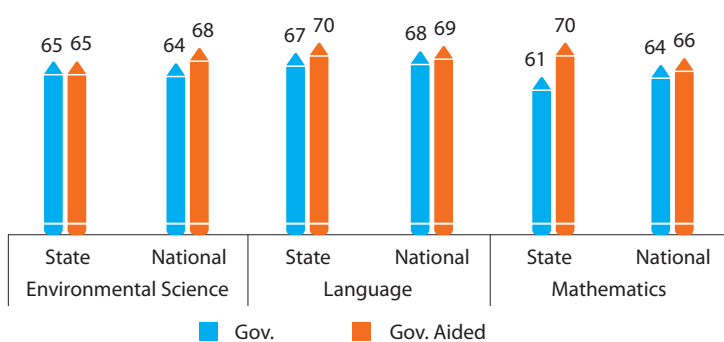
#### By Gender



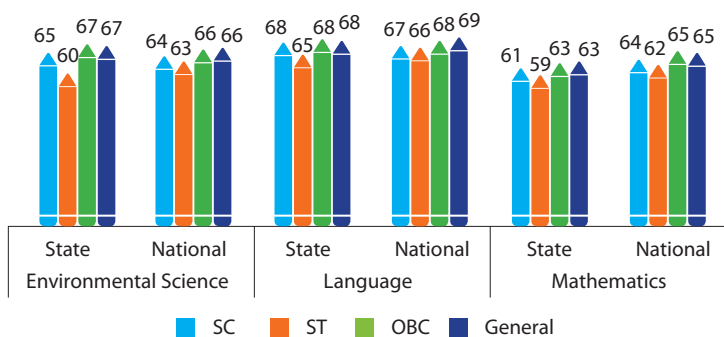
#### By School Location



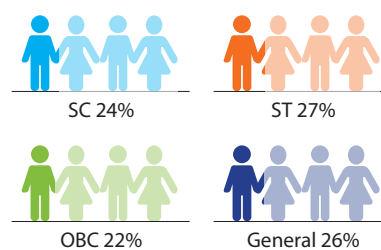
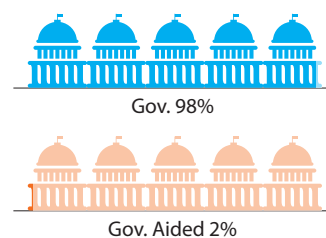
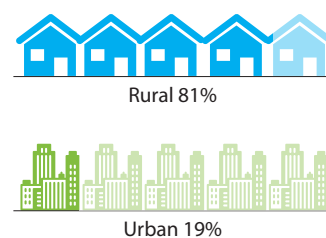
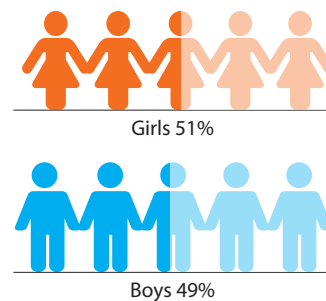
#### By School Management



#### By Social Groups



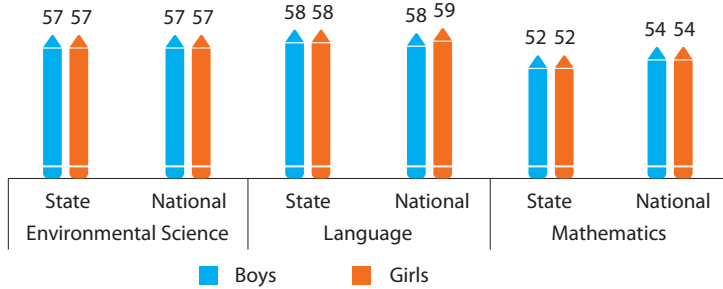
### PARTICIPATION



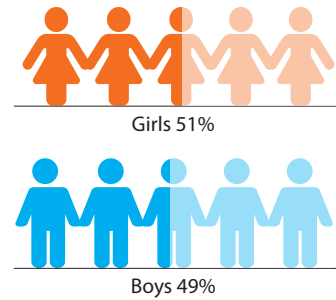
# Class 5 State Results by Student Groups

## PERFORMANCE

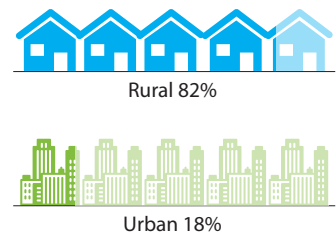
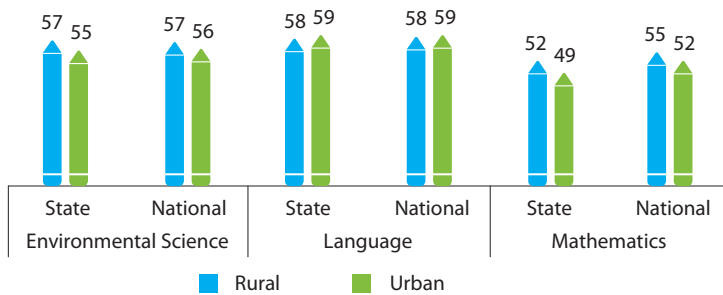
### By Gender



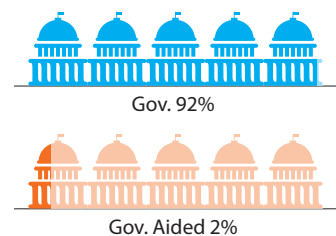
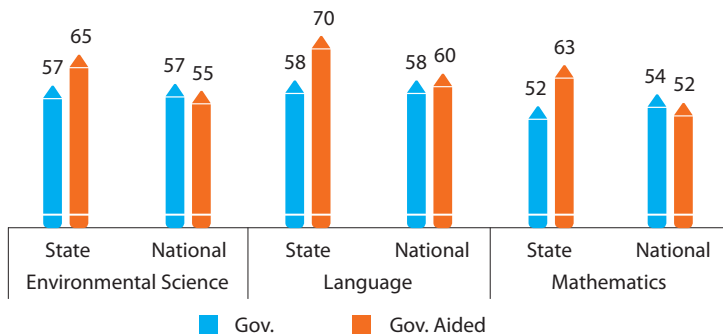
## PARTICIPATION



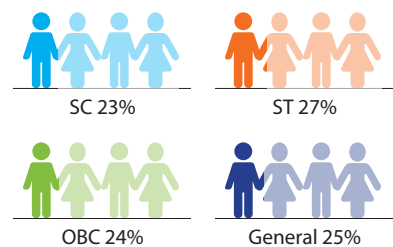
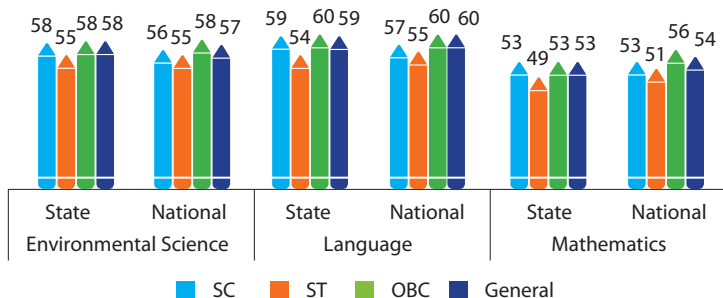
### By School Location



### By School Management



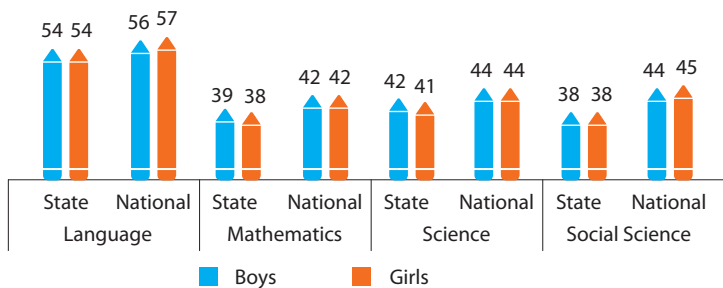
### By Social Groups



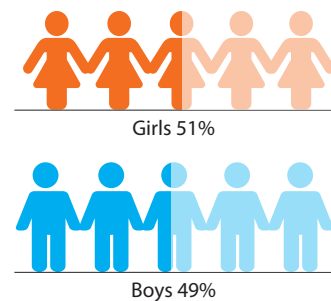
## Class 8 State Results by Student Groups

### PERFORMANCE

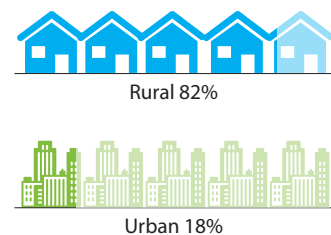
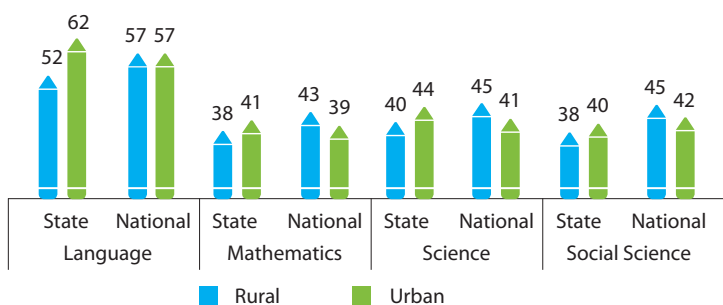
#### By Gender



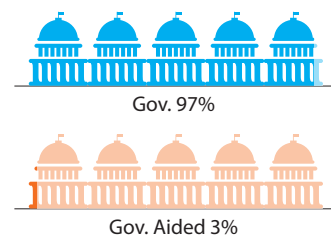
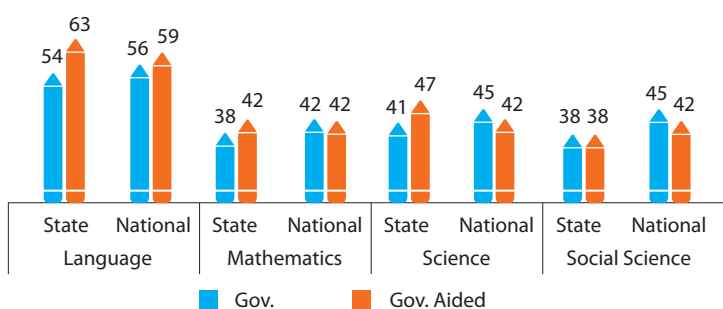
### PARTICIPATION



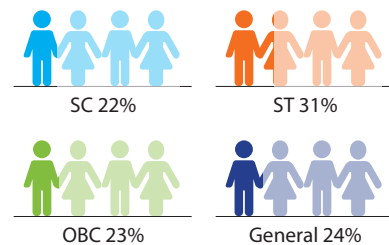
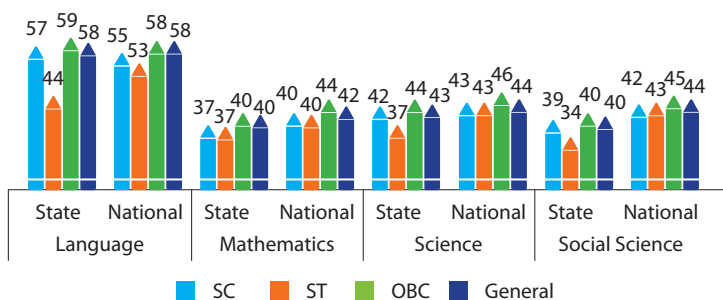
#### By School Location



#### By School Management



#### By Social Groups



## What children say about schools?



**97%** children across the grades like to come to school.



**25%** students in Class 3, **23%** in Class 5 and **22%** students in Class 8 find it difficult to travel to school.

**81%** children in Class 3, **84%** in Class 5 and **85%** children in Class 8 could understand what the teachers say in the classroom.

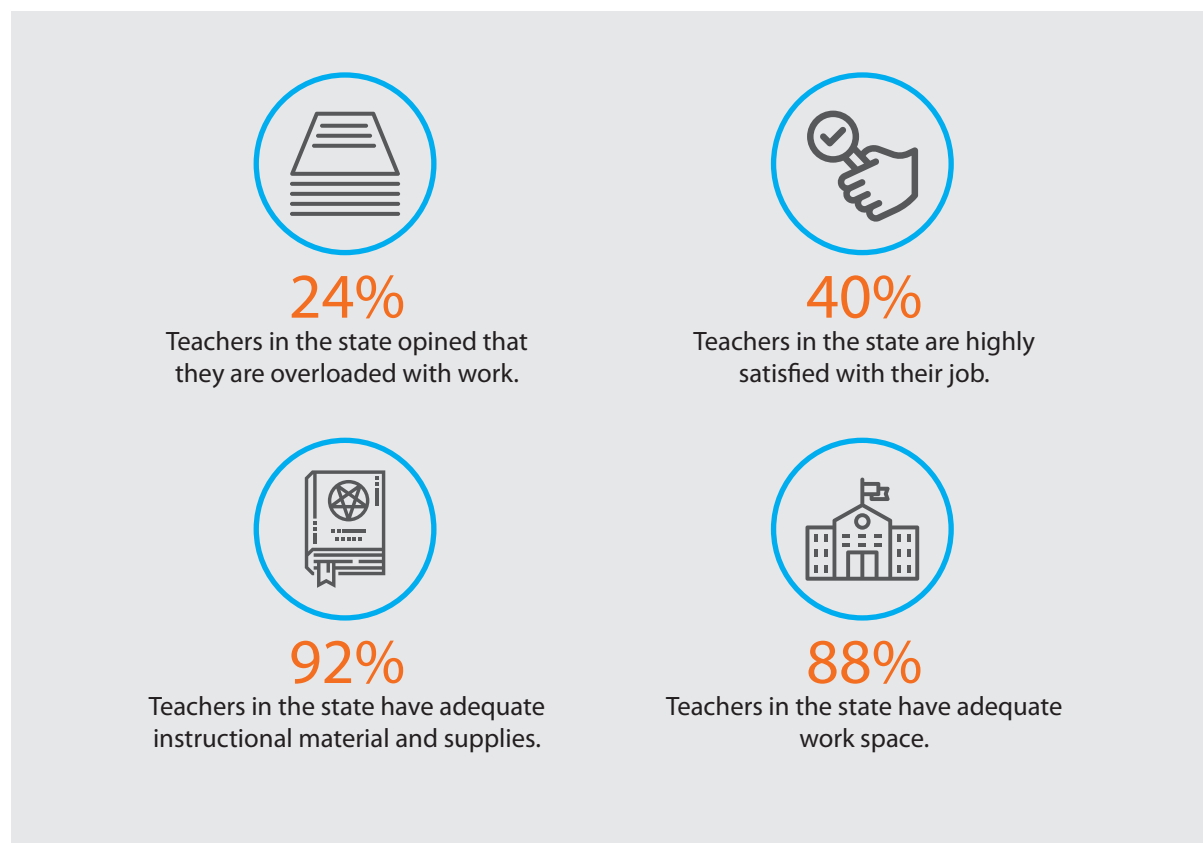
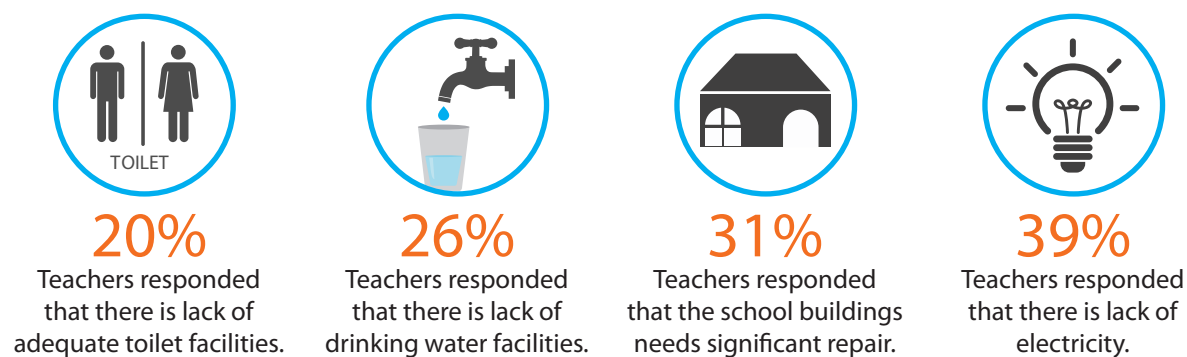
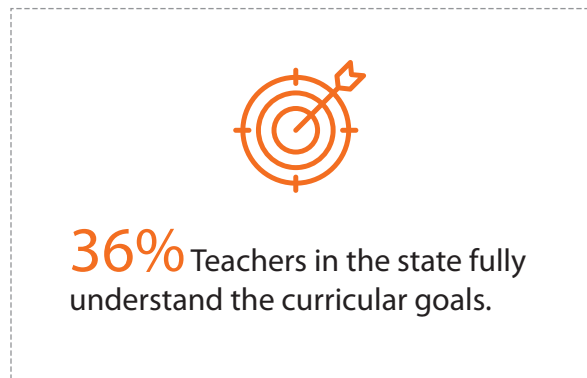
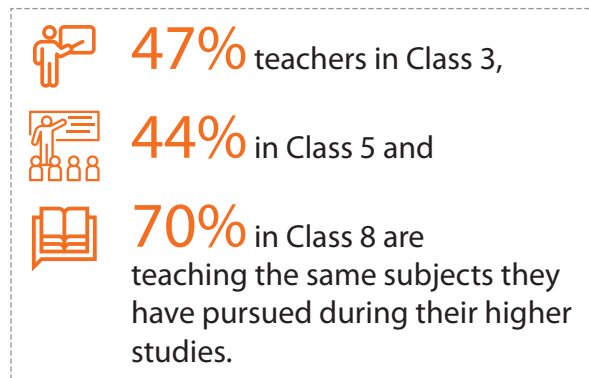


For **71%** students in Class 3 and Class 5 and **65%** students in Class 8, the language used at home and by the teachers is the same.



**82%** students in Class 3, **85%** in Class 5 and **79%** in Class 8 go out and play during the games period.

## What teachers responded?

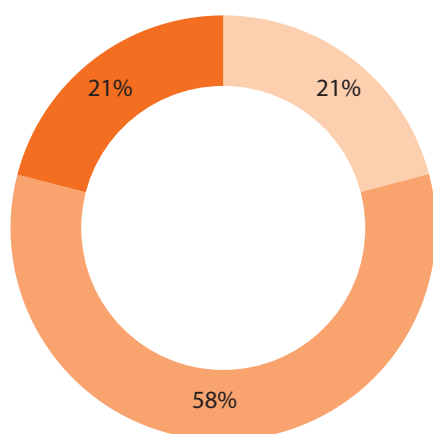


## How do teachers assess children in the classroom?

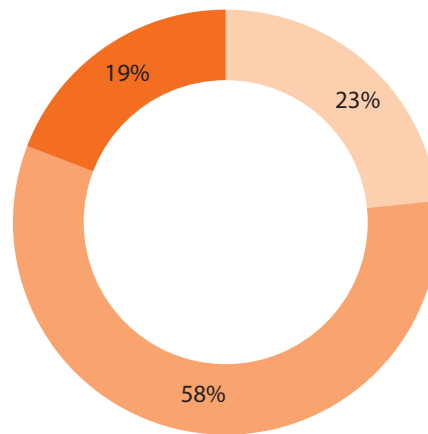
	Never (in %)	For some lessons (in %)	Almost every lesson (in %)
Oral Tests	8	35	57
Written Tests	3	29	67
Multiple choice type	4	28	68
Observation	4	30	66
Home assignments	4	40	56
Student self assessment	10	56	34
Project work	5	53	42
Peer assessment	16	59	25
Portfolio	25	50	25

## What teachers say about parent's involvement?

Parental support for students' Achievement



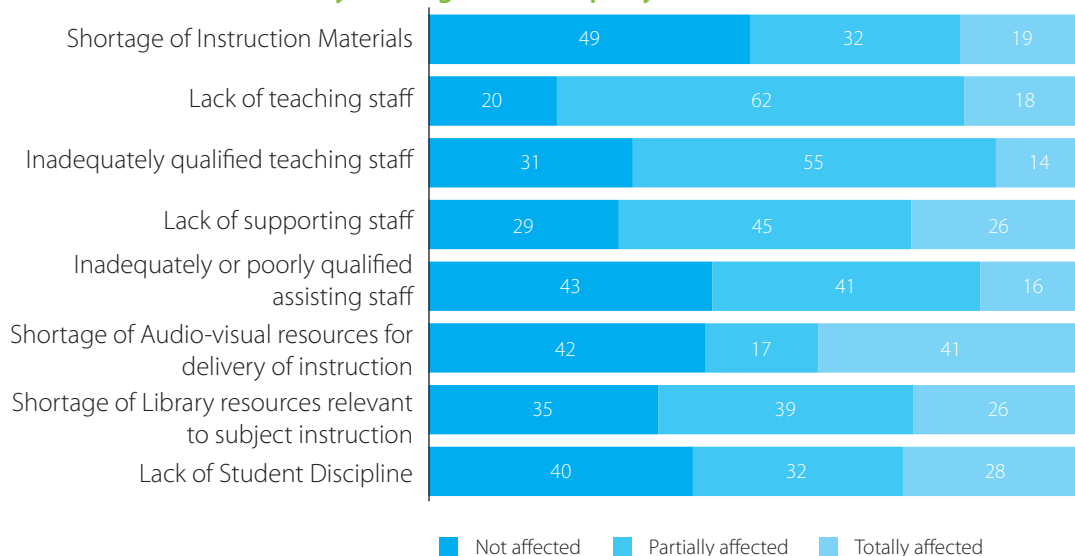
Parental involvement in school activities



Low Medium High

## What the head teacher responded?

School activities affected by shortage or inadequacy



Not affected Partially affected Totally affected

E.g. 49% of the head teacher responded that the school activities were not affected by the shortage of instructional materials.

## Average Performance of the District

### Class 3

District Name	District Mean
South Tripura	74
Khowai	64
Sepahijala	64
North Tripura	64
Gomati	63
West Tripura	63
Unakoti	57
Dhalai	57

### Class 5

District Name	District Mean
Khowai	58
Sepahijala	58
South Tripura	57
Unakoti	55
Gomati	54
North Tripura	54
Dhalai	52
West Tripura	52

### Class 8

District Name	District Mean
Khowai	44
South Tripura	44
Gomati	43
Sepahijala	42
North Tripura	42
Unakoti	41
West Tripura	41
Dhalai	39

## Performance of the State in Learning Outcomes (LOs)

Annex - I

LO Code	Learning Outcome Class 3	Average Performance (in Percent)
<b>EVS</b>		
E302	Identifies simple features (e.g. movement, at places found/ kept, eating habits, sounds) of animals and birds in the immediate surroundings	45
E303	Identifies relationships with and among family members	65
E304	Identifies objects, signs (vessels, stoves, transport, means of communication, transport, signboards etc.), places (types of houses/shelters, bus stand, petrol pump etc.) activities (works people do, cooking processes, etc.) at home/school/ neighbourhood	62
E305	Describes need of food for people of different age groups, animals/birds, availability of food and water and use of water at home and surroundings	63
E307	Groups objects, birds, animals, features, activities according to differences/similarities using different senses. (e.g. appearance/place of living/ food/ movement/ likes-dislikes/ any other features)	71
E309	Identifies directions, location of objects/places in simple maps using signs/symbols/verbally	52
E310	Guesses properties, estimates quantities of materials/ activities in daily life and verifies using symbols/non-standard units	61
E311	Records observations, experiences, information on objects/ activities/places visited in different ways and predicts patterns etc	59
E313	Observes rules in games (local, indoor, outdoor)	44
E314	Voices opinion on good/bad touch , stereotypes for tasks/ play/food in family w.r.t gender, misuse/wastage of food and water in family and school	73
<b>Language</b>		
L304	Reads small texts with comprehension i.e., identifies main ideas, details, sequence and draws conclusions	68
L312	Reads printed scripts on the classroom walls: poems, posters, charts etc	63
<b>Mathematics</b>		
M301	Reads and writes numbers up to 999 using place value	60
M302	Compares numbers up to 999 based on their place values	70

LO Code	Learning Outcome Class 3	Average Performance (in Percent)
M303	Solves simple daily life problems using addition and subtraction of three digit numbers with and without regrouping	54
M304	Constructs and uses the multiplication facts (up till 10) in daily life situations	64
M305	Analyses and applies an appropriate number operation in the situation/ context	54
M306	Explains the meaning of division facts by equal grouping/ sharing and finds it by repeated subtraction	56
M309	Identifies and makes 2D-shapes by paper folding, paper cutting on the dot grid, using straight lines etc	75
M311	Fills a given region leaving no gaps using a tile of a given shape	33
M312	Estimates and measures length and distance using standard units like centimetres or metres & identifies relationships	41
M317	Reads the time correctly to the hour using a clock/watch	70
M318	Extends patterns in simple shapes and numbers	49
M319	Records data using tally marks, represents pictorially and draws conclusions	78

LO Code	Learning Outcome Class 5	Average Performance (in Percent)
<b>EVS</b>		
E403	Identifies relationship with and among family members in extended family	64
E410	Records observations/experiences/information for objects, activities, phenomena, places visited in different ways and predicts patterns and activities/ phenomena	60
E501	Explains the super senses and unusual features (sight, smell, hear, sleep, sound, etc.) of animals and their responses to light, sound, food etc	38
E503	Describes the interdependence among animals, plants and humans	55
E504	Explains the role and functions of different institutions in daily life (Bank, Panchayat, cooperatives, police station, etc.)	70
E505	Establishes linkages among terrain, climate, resources (food, water, shelter, livelihood) and cultural life. (e.g. life in distant/ difficult areas like hot/cold deserts)	26
E506	Groups objects, materials, activities for features/properties such as shape, taste, colour , texture, sound, traits etc.	34
E507	Traces the changes in practices, customs, techniques of past and present through coins, paintings, mon-uments, museum etc. and interacting with elders	56
E508	Guesses (properties, conditions of phenomena), estimates spatial quantities (distance, area, volume, weight etc. ) and time in simple standard units and verifies using simple tools/ set ups	58
E509	Records observations/experiences/information in an organized manner (e.g. in tables/ sketches/ bar graphs/ pie charts) and predicts patterns in activities/phenomena to establish relation between cause and effect	51
E510	Identifies signs, directions, location of different objects/ landmarks of a locality /place visited in maps and predicts directions w.r.t. positions at different places for a location	54
E512	Voices opinions on issues observed/experienced and relates practices /happenings to larger issues of society	52
E513	Suggests ways for hygiene, health, managing waste, disaster/ emergency situations and protecting/saving resources	67
<b>Language</b>		
L504	Reads and comprehends independently storybooks, news items/ headlines, advertisements etc	52
L508	Reads text with comprehension, locates details and sequence of events	59

LO Code	Learning Outcome Class 5	Average Performance (in Percent)
<b>Mathematics</b>		
M401	Applies operations of numbers in daily life situations	53
M412	Explores the area and perimeter of simple geometrical shapes (triangle, rectangle, square) in terms of given shape as a unit	51
M418	Calculates time intervals/duration of familiar daily life events by using forward or backward counting/addition and subtraction	66
M421	Represent the collected information in tables and bar graphs and draws inferences from these	57
M501	Reads and writes numbers bigger than 1000 being used in her/his surroundings	61
M504	Estimates sum, difference, product and quotient of numbers and verifies the same using different strategies like using standard algorithms or breaking a number and then using operation	55
M505	Finds the number corresponding to part of a collection	58
M506	Identifies and forms equivalent fractions of a given fraction	38
M508	Converts fractions into decimals and vice versa	51
M509	Classifies angles into right angle, acute angle, obtuse angle and represents the same by drawing and tracing	45
M512	Relates different commonly used larger and smaller units of length, weight and volume and converts larger units to smaller units and vice versa	51
M513	Estimates the volume of a solid body in known units	35
M514	Applies the four fundamental arithmetic operations in solving problems involving money, length, mass, capacity and time intervals	46
M515	Identifies the pattern in triangular number and square number	43
M516	Collects data related to various daily life situations, represents it in tabular form and as bar graphs and interprets it	49

LO Code	Learning Outcome Class 8	Average Performance (in Percent)
<b>Language</b>		
L813	Read textual/non-textual materials with comprehension and identifies the details, characters, main idea and sequence of ideas and events while reading	53
<b>Mathematics</b>		
M601	Solves problems involving large numbers by applying appropriate operations	32
M606	Solves problems on daily life situations involving addition and subtraction of fractions / decimals	32
M620	Finds out the perimeter and area of rectangular objects in the surroundings like floor of the class room, surfaces of a chalk box etc	37
M621	Arranges given/collected information in the form of table, pictograph and bar graph and interprets them	38
M702	Interprets the division and multiplication of fractions	35
M705	Solves problems related to daily life situations involving rational numbers	33
M706	Uses exponential form of numbers to simplify problems involving multiplication and division of large numbers	29
M707	Adds/subtracts algebraic expressions	50
M710	Solves problems related to conversion of percentage to fraction and decimal and vice versa	24
M717	Finds out approximate area of closed shapes by using unit square grid/ graph sheet	34
M719	Finds various representative values for simple data from her/ his daily life contexts like mean, median and mode	47
M721	Interprets data using bar graph such as consumption of electricity is more in winters than summer	38
M801	Generalises properties of addition, subtraction, multiplication and division of rational numbers through patterns	26
M802	Finds rational numbers between two given rational numbers	41
M803	Proves divisibility rules of 2, 3, 4, 5, 6, 9 and 11	43
M804	Finds squares, cubes, square roots and cube roots of numbers using different methods	39
M808	Use various algebraic identities in solving problems of daily life	55
M812	Verifies properties of parallelogram and establishes the relationship between them through reasoning	27
M818	Finds surface area and volume of cuboidal and cylindrical object	35
M819	Draws and interprets bar charts and pie charts	40

LO Code	Learning Outcome Class 8	Average Performance (in Percent)
<b>Science</b>		
SCI703	Classifies materials and organisms based on properties/ characteristics	36
SCI704	Conducts simple investigation to seek answers to queries	28
SCI705	Relates processes and phenomenon with causes	40
SCI708	Measures and calculates e.g., temperature; pulse rate; speed of moving objects; time period of a simple pendulum, etc	44
SCI710	Plots and interprets graphs	36
SCI711	Constructs models using materials from surroundings and explains their working	27
SCI801	Differentiates materials, organism and processes	55
SCI804	Relates processes and phenomenon with causes	41
SCI805	Explains processes and phenomenon	33
SCI807	Measures angles of incidence and reflection, etc	41
SCI811	Applies learning of scientific concepts in day-to-day life	41
SCI813	Makes efforts to protect environment	55
<b>Social Science</b>		
SST605	Identifies latitudes and longitudes, e.g., poles, equator, tropics, States/UTs of India and other neighbouring countries on globe and the world map	20
SST610	Locates important historical sites, places on an outline map of India	19
SST625	Describes the functioning of rural and urban local government bodies in sectors like health and education	32
SST703	Explains preventive actions to be undertaken in the event of disasters	69
SST704	Describes formation of landforms due to various factors	45
SST722	Explains the significance of equality in democracy	43
SST726	Describes the process of election to the legislative assembly	31
SST731	Explains the functioning of media with appropriate examples from newspapers	36
SST733	Differentiates between different kinds of markets	57
SST734	Traces how goods travel through various market places.	48
SST802	Describes major crops, types of farming and agricultural practices in her/his own area/state	36
SST805	Locates distribution of important minerals e.g. coal and mineral oil on the world map	30
SST807	Justifies judicious use of natural resources	45
SST809	Draws interrelationship between types of farming and development in different regions of the world	34

LO Code	Learning Outcome Class 8	Average Performance (in Percent)
SST810	Distinguishes the modern period from the medieval and the ancient periods through the use of sources	34
SST815	Explains the origin, nature and spread of the revolt of 1857 and the lessons learned from it	38
SST816	Analyses the decline of pre-existing urban centers and handicraft industries and the development of new urban centers and industries in India during the colonial period	21
SST818	Analyses the issues related to caste, women, widow remarriage, child marriage, social reforms and the laws and policies of colonial administration towards these issues	56
SST823	Applies the knowledge of the Fundamental Rights to find out about their violation, protection and pro-motion in a given situation	24
SST827	Describes the process of making a law. (e.g. Domestic Violence Act, RTI Act, RTE Act)	25
SST831	Identifies the role of Government in providing public facilities such as water, sanitation, road, electricity etc., and recognizes their availability	30
SST833	Draws bar diagram to show population of different countries/ India/states	52

## Core Team

### MHRD

**Ms. Rina Ray**, Secretary, School Education and Literacy (SE&L)

**Shri Anil Swarup**, Former Secretary, School Education & Literacy, SE&L, (till 30<sup>th</sup> June 2018)

**Ms. Anita Karwal**, Chairperson, CBSE and Chairperson, NCTE

**Shri. Maneesh Garg**, Joint Secretary, School Education and Literacy (SE&L)

**Shri. Girish Chandrashekhar Hosur**, Director, School Education and Literacy (SE&L)

**Ms. R. Savithri**, DDG, Statistics

### NCERT

**Prof. Hrushikesh Senapaty**, Director, NCERT

**Prof. Indrani Bhaduri**, Head, ESD and National Coordinator NAS

**Prof. Sridhar Srivastava**, Professor, ESD

**Prof. Veer Pal Singh**, Professor, ESD

**Prof. A.D. Tewari**, Professor, ESD

**Dr. Pratima Kumari**, Associate Professor

**Dr. Sukhvinder**, Assistant Professor

**Dr. Vishal D. Pajankar**, Assistant Professor

**Dr. Satya Bhushan**, Assistant Professor

**Dr. Gulfam**, Assistant Professor

**Shri N.L. Srinivas**, Sr. System Analyst

**Md. Arif Sadiq**, Programmer

**Shri Vishwa Bandhu**, Programmer

### UN ORGANIZATION /EXTERNAL

**Dr. Rudra Sahoo**, Education Specialist, UNICEF

### STATE FUNCTIONARIES

**State Directorate of Education, SCERTs, SIEs, DIETs, Schools**



## **Examinations**

An examination is a formal test of an individual student's knowledge or proficiency in a subject on the curriculum. The results of examinations apply to individual students, enabling them to progress through school or apply for further education or employment. Taken together, examination results provide an overall snapshot of students' performance at the end of a year of a course of learning at school. Examination results do not indicate the reasons behind high or low achievement of students.

## **Achievement Surveys**

Achievement Surveys provide a measure of learning across a representative sample of students. They allow classification of students at a specific grade level by their ability (what students know and can do) in different subjects on the curriculum. National Achievement Surveys provide a "Health Check" to the education system by analyzing achievement based on a range of background factors (School, home, teachers). They potentially enable policy makers and practitioners to address the challenges to enhance student learning.

