

NAS 2017

NATIONAL ACHIEVEMENT SURVEY

Class : 3, 5 and 8

JAMMU AND KASHMIR

State Learning Report



The National Achievement Survey (NAS) 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 to 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, children are responding 62% (Mathematics) 58% (EVS) and 64% (Language) questions correctly.

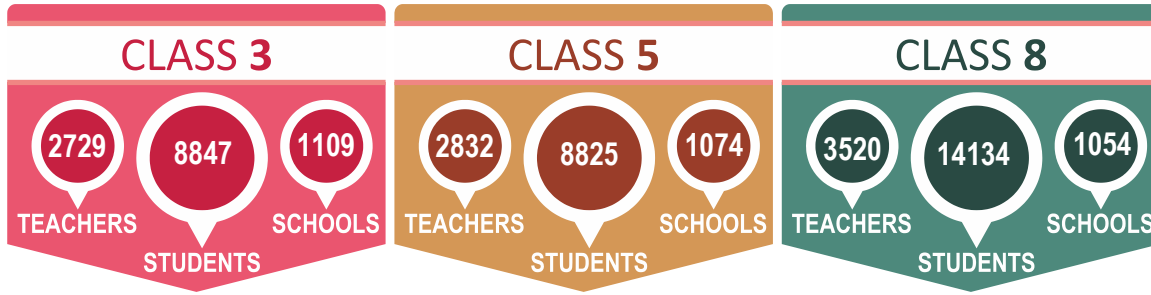
In class 5, on an average, children are responding 54% (Mathematics) 55% (EVS) and 54% (Language) questions correctly.

In class 8, on an average, children are responding 43% (Language) 37% (Mathematics), 38% (Science) and 34% (Social Science) questions correctly.

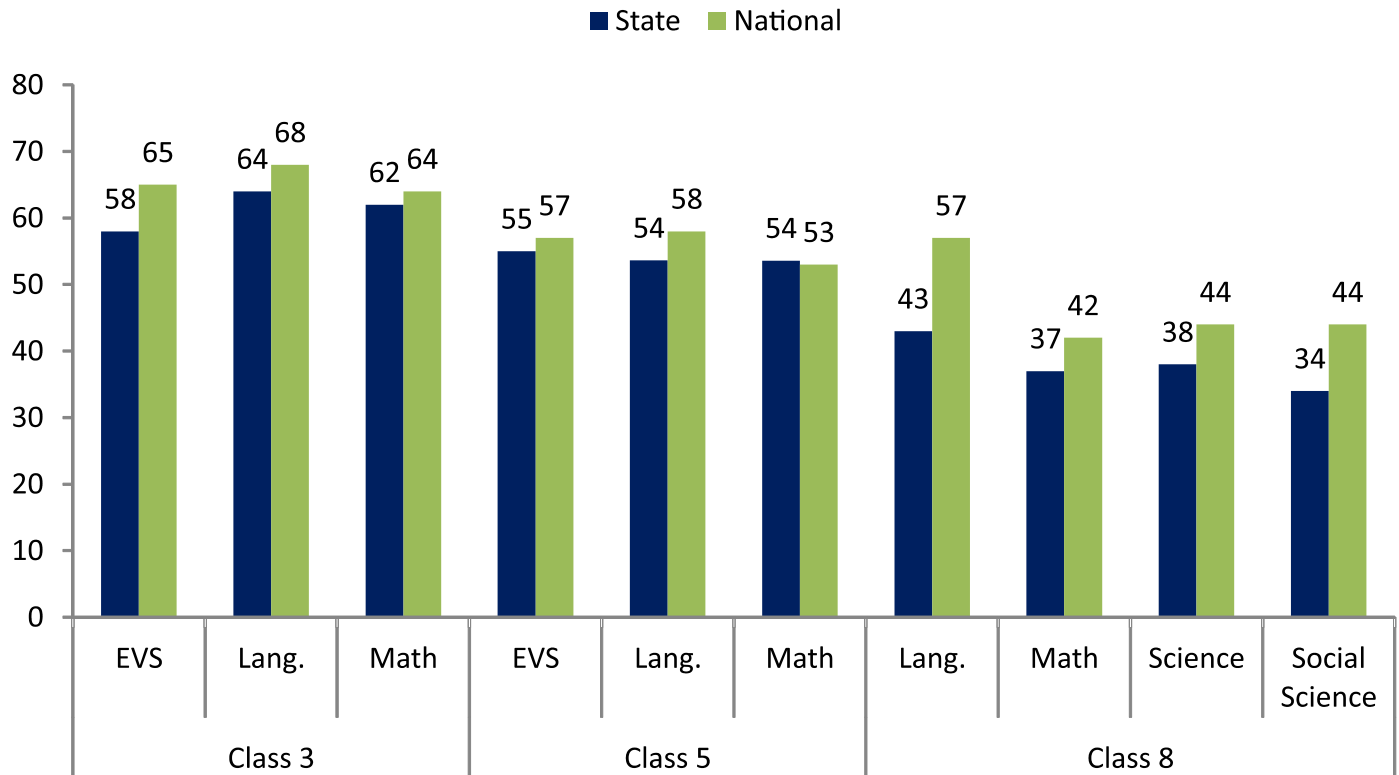
85% children could understand what teacher say in the classroom.

43% of the school buildings need significant repair.

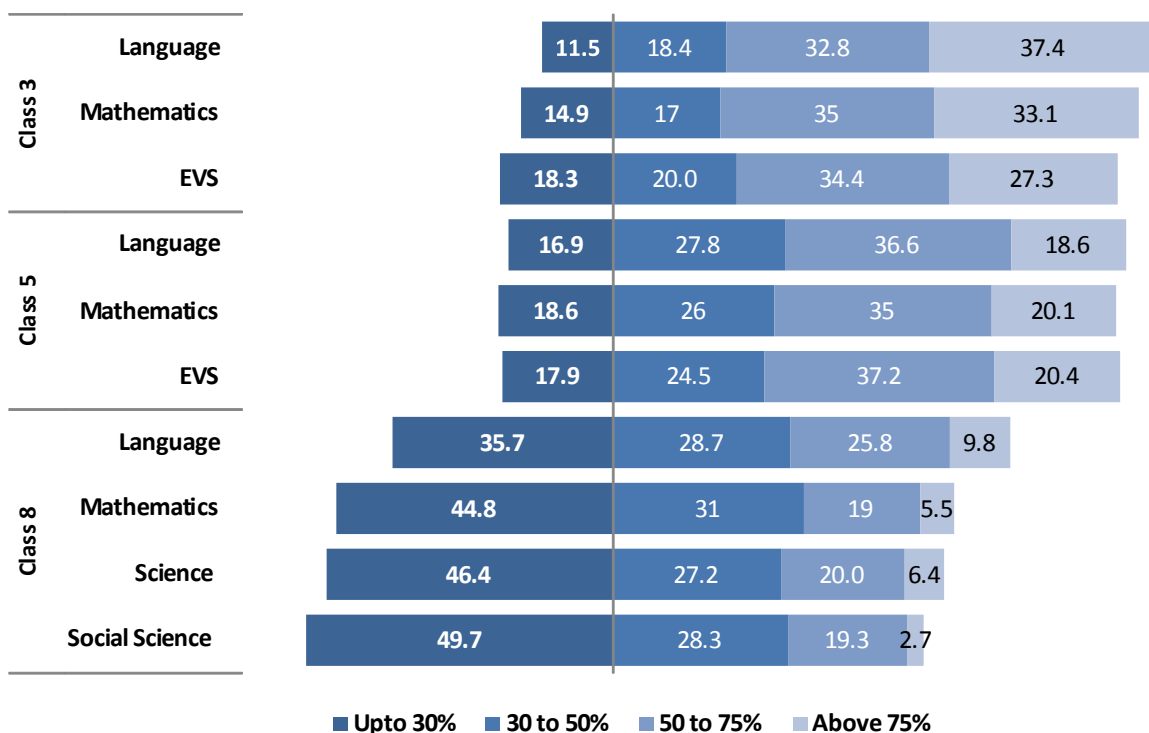
Participation



Average Achievement by Classes and Subjects



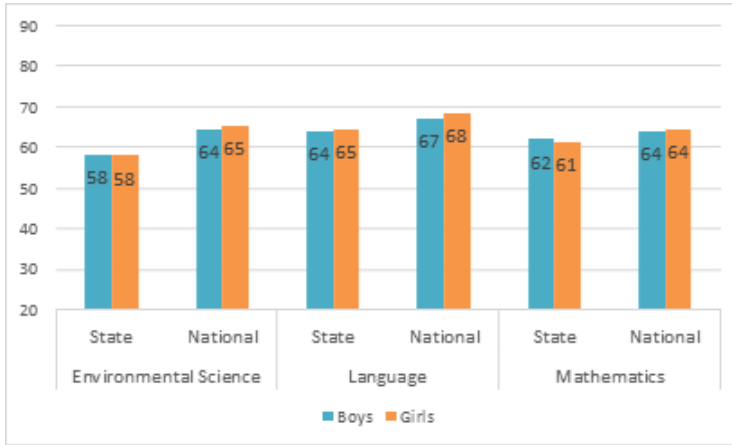
Distribution of Students Achievement by Classes and Subjects



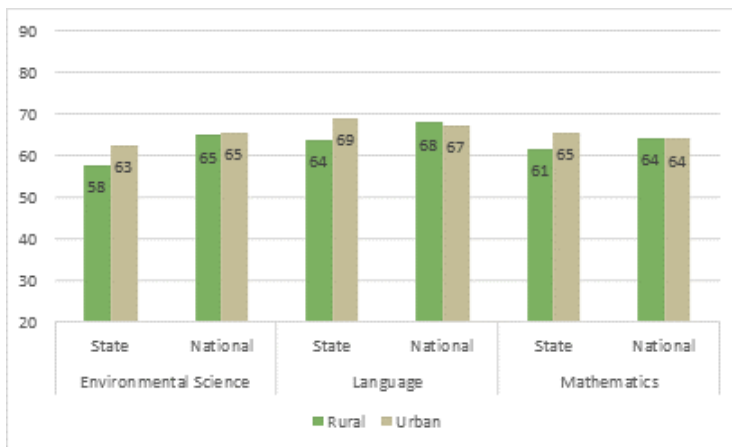
E.g. In Class 3 language, percentage of students achieving upto 30% is 11.5, between 30%-50% is 18.4, between 50%-75% is 32.8 and above 75% is 37.4.

PERFORMANCE

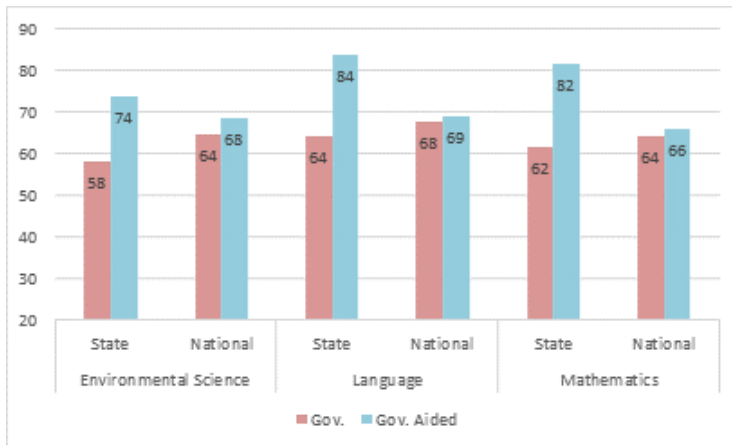
By Gender



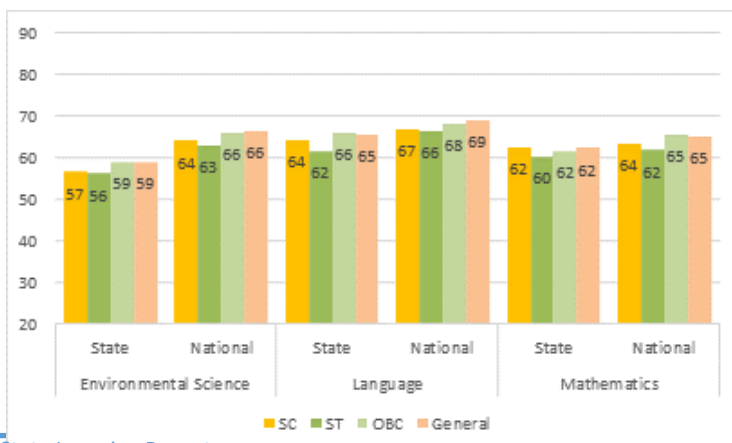
By School Location



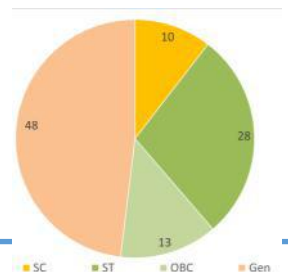
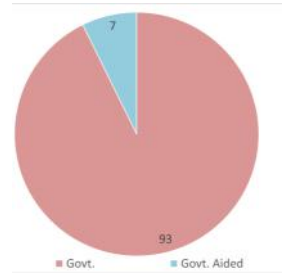
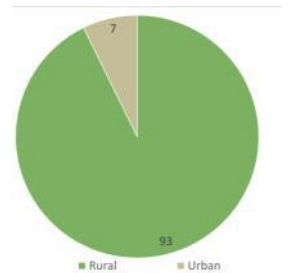
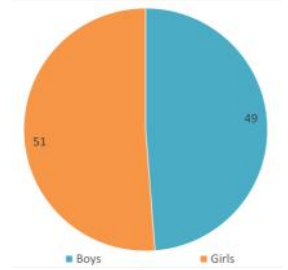
By School Management



By Social Groups

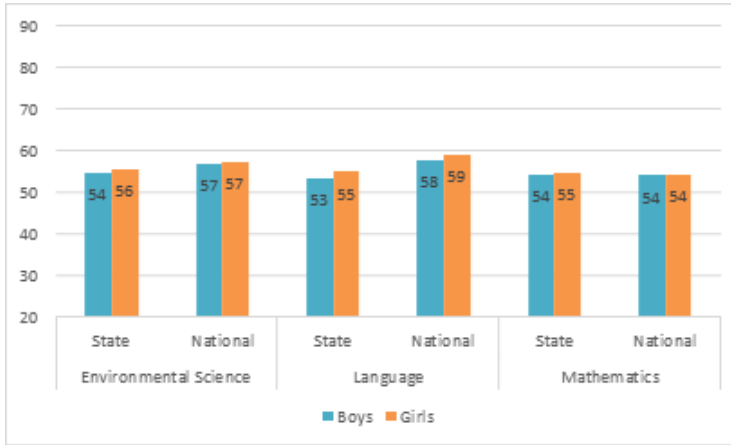


PARTICIPATION

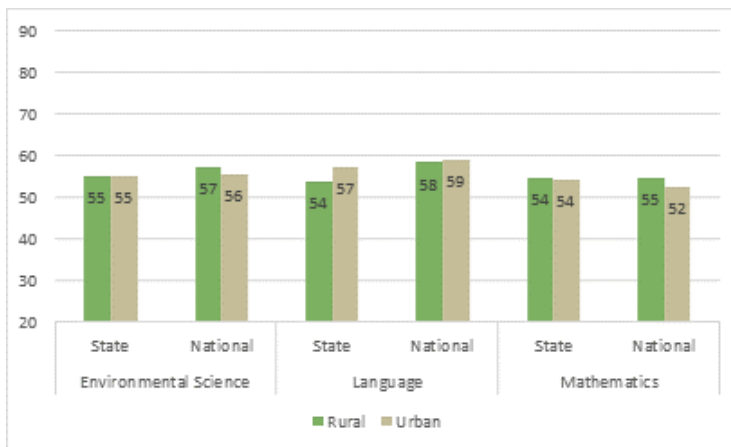


PERFORMANCE

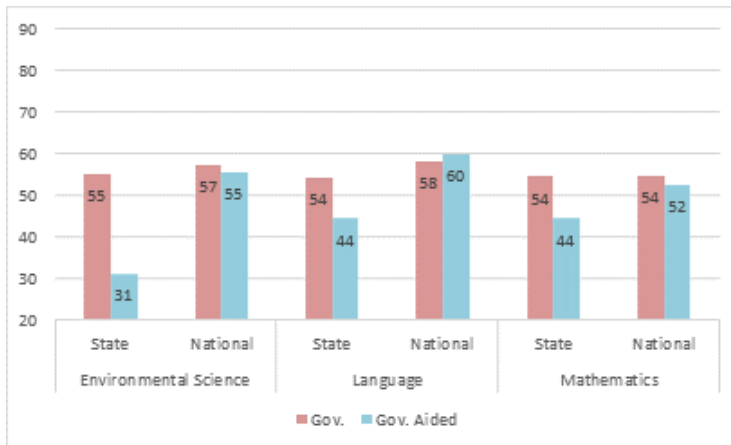
By Gender



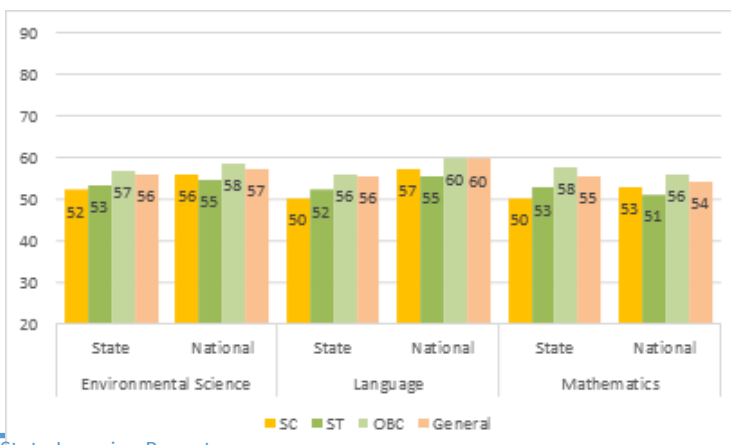
By School Location



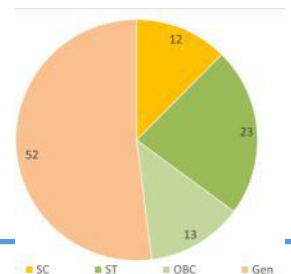
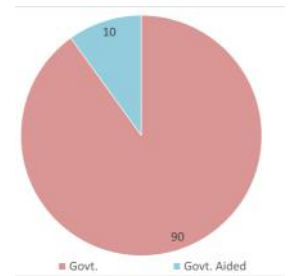
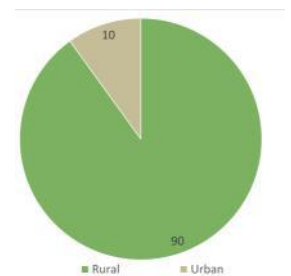
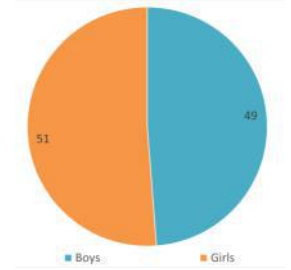
By School Management



By Social Groups



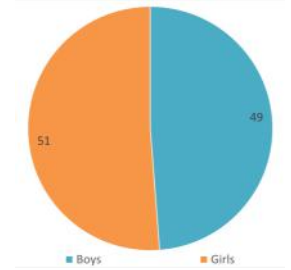
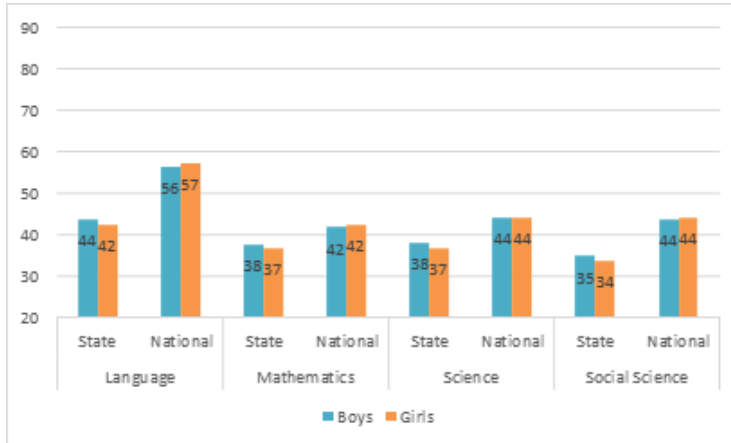
PARTICIPATION



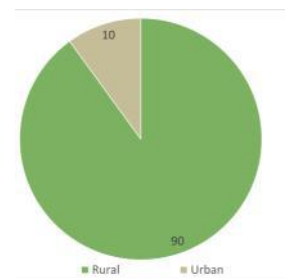
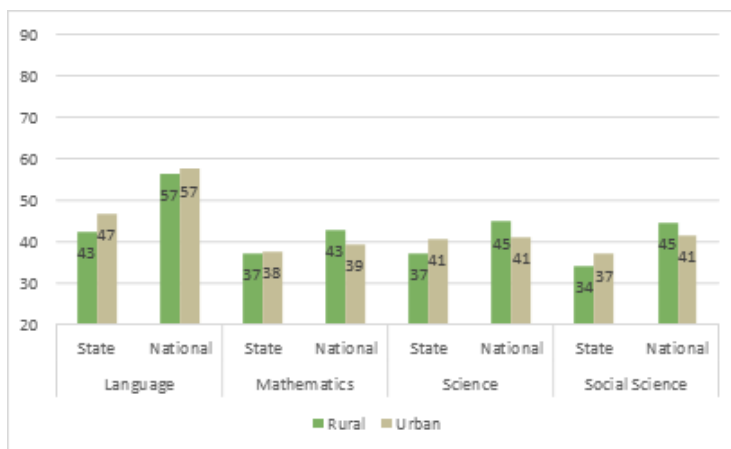
PERFORMANCE

PARTICIPATION

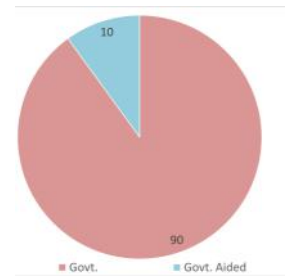
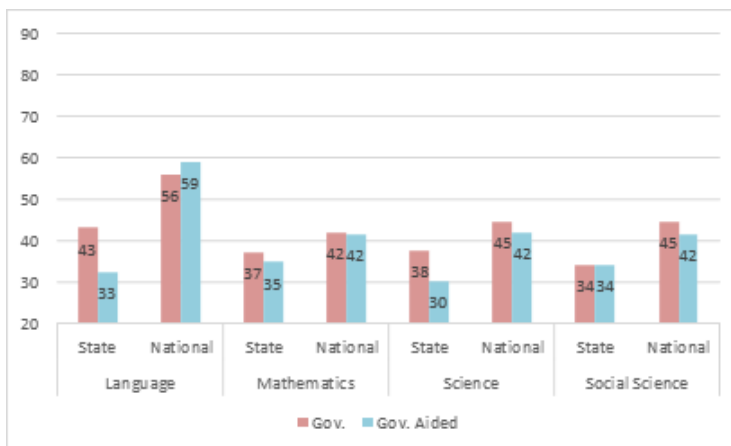
By Gender



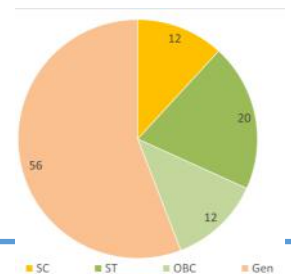
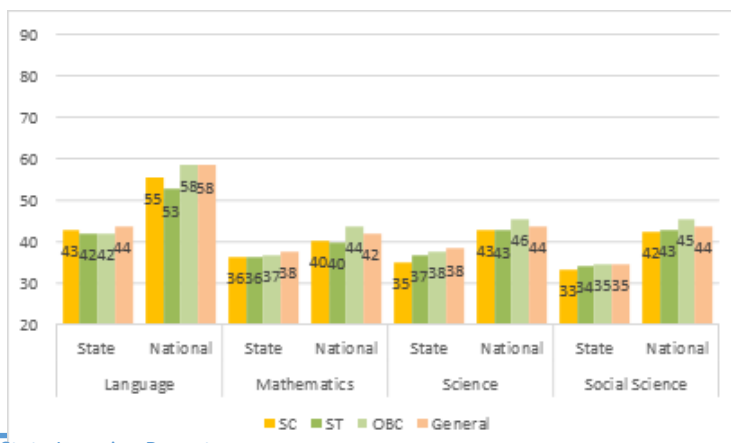
By School Location



By School Management



By Social Groups





What children say about schools?



In Class 3 and Class 8
95% and in Class 5
96% children like to
come to school.

26% students in
Class 3, 24% in
Class 5 and 29%
in Class 8 find
difficult to travel

**82% children in Class 3,
85% in Class 5 and 84%
in Class 8 could under-
stand what teachers say
in the classroom.**

For 52% students in Class 3, 49%
in Class 5 and 42% in Class 8,
the language used at home and
by teachers are same.

79% students in
Class 5 and 77%
students in Class
3 and Class 8 go
out and play dur-
ing games period.



What teachers responded?



38% teachers in Class 3, 41% in Class 5 and 47% in Class 8 are teaching the same subject they have pursued during their higher study.

46%

Teachers in the state fully understand the curricular goals

75%

Teachers in the state have adequate instructional material and supplies.

44%

Teachers in the state opined they are overloaded with the work.

54%

Teachers in the state are highly satisfied with their Job.

74%

Teachers in the state have adequate work space.

43% teachers responded that the school buildings need significant repair.

30% teachers responded that there is lack of Drinking water facilities.



24% teachers responded that there is lack of adequate toilet facilities.

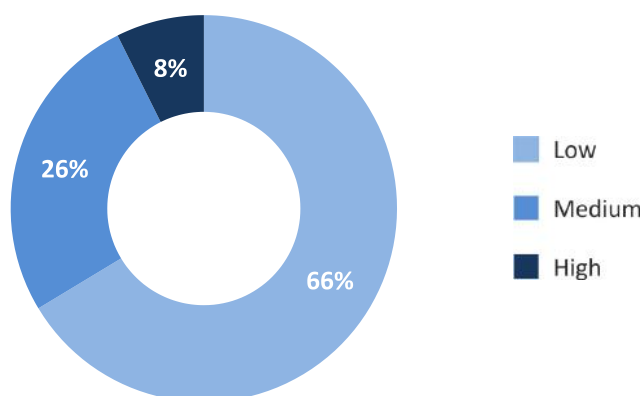
48% teachers responded that there is lack of electricity.

How do teachers Assess children in classroom

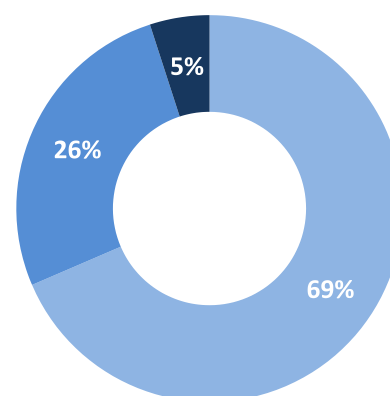
	Never (in %)	For some lessons (in %)	Almost every lesson (in %)
Oral Tests	5	28	67
Written Tests	2	27	71
Multiple choice type	3	35	61
Observation	5	30	65
Home assignments	4	17	79
Student self assessment	12	53	35
Project work	31	58	10
Peer assessment	14	60	26
Portfolio	28	51	21

What Teachers say about Parents Involvement

Parental Support for Students' Achievement

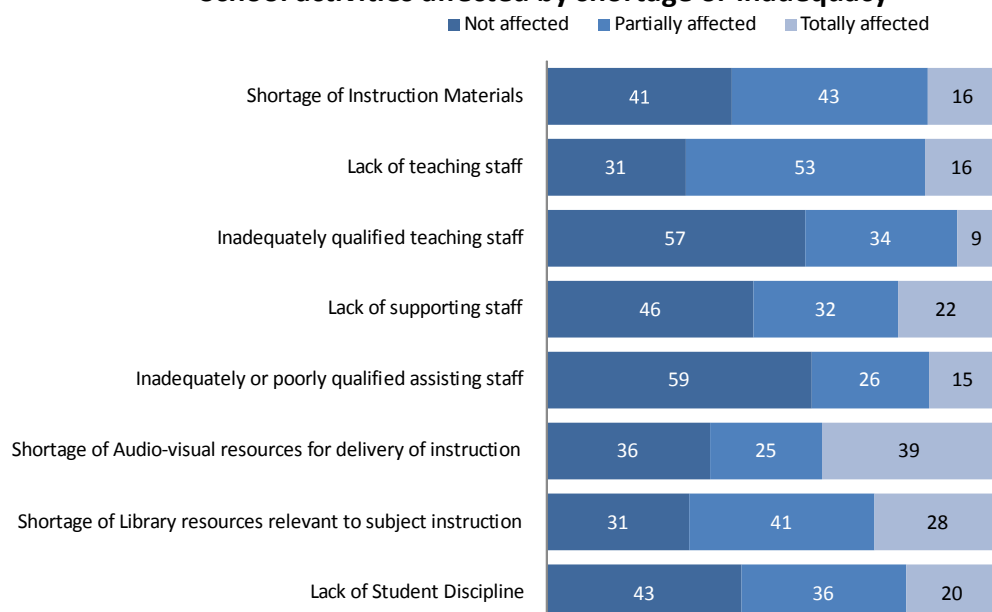


Parental involvement in school activities



What Head teacher responded?

School activities affected by shortage or inadequacy



E.g. 41% 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
KULGAM	71
BARAMULA	71
SRINAGAR	69
SAMBA	68
BADGAM	68
KUPWARA	67
GANDERBAL	66
ANANTNAG	65
SHOPIAN	64
RAJAURI	64
RAMBAN	63
KARGIL	62
UDHAMPUR	61
BANDIPORA	60
JAMMU	58
LEH (LADAKH)	58
PUNCH	56
REASI	55
KISHTWAR	54
KATHUA	53
DODA	52
PULWAMA	31

Class 5

District Name	District Mean
BARAMULA	64
BADGAM	64
SHOPIAN	64
SRINAGAR	61
KUPWARA	61
KULGAM	61
PULWAMA	61
RAMBAN	59
SAMBA	58
ANANTNAG	56
BANDIPORA	55
GANDERBAL	55
PUNCH	51
JAMMU	50
RAJAURI	49
KARGIL	49
REASI	47
KATHUA	47
KISHTWAR	46
UDHAMPUR	46
DODA	46
LEH (LADAKH)	42

Class 8

District Name	District Mean
KUPWARA	47
BADGAM	46
GANDERBAL	44
KISHTWAR	43
PUNCH	42
RAMBAN	41
BARAMULA	41
SAMBA	41
SRINAGAR	39
RAJAURI	38
BANDIPORA	37
UDHAMPUR	37
DODA	36
LEH (LADAKH)	36
KATHUA	35
ANANTNAG	34
JAMMU	34
REASI	32
KARGIL	27
PULWAMA	19
KULGAM	18
SHOPIAN	14

LO Code	Learning Outcome Class 3	Average Performance (in Percent)
EVS		
E302	identifies simple features (e.g. movement, at places found/ kept, eating habits, sounds) of animals and birds in the immediate surroundings.	52
E303	identifies relationships with and among family members	55
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	57
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	64
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)	61
E309	identifies directions, location of objects/places in simple maps using signs/symbols/verbally	58
E310	guesses properties, estimates quantities of materials/activities in daily life and verifies using symbols/ non-standard units.	54
E311	Records observations, experiences, information on objects/activities/places visited in different ways and predicts patterns etc.	42
E313	observes rules in games (local. indoor, outdoor)	28
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.	60
Language		
L304	reads small texts with comprehension i.e., identifies main ideas, details, sequence and draws conclusions	65
L312	reads printed scripts on the classroom walls: poems, posters, charts etc	61
Mathematics		
M301	reads and writes numbers up to 999 using place value	59
M302	compares numbers up to 999 based on their place values	69
M303	solves simple daily life problems using addition and subtraction of three digit numbers with and without regrouping	55
M304	constructs and uses the multiplication facts (up till 10) in daily life situations	66
M305	analyses and applies an appropriate number operation in the situation/ context	57
M306	Explains the meaning of division facts by equal grouping/sharing and finds it by repeated subtraction	58
M309	identifies and makes 2D-shapes by paper folding, paper cutting on the dot grid, using straight lines etc.	76
M311	fills a given region leaving no gaps using a tile of a given shape	36
M312	estimates and measures length and distance using standard units like centimetres or metres & identifies relationships	30
M317	reads the time correctly to the hour using a clock/watch	71
M318	extends patterns in simple shapes and numbers	54
M319	Records data using tally marks, represents pictorially and draws conclusions	72

LO Code	Learning Outcome Class 5	Average Performance (in Percent)
EVS		
E403	Identifies relationship with and among family members in extended family	50
E410	Records observations/experiences/information for objects, activities, phenomena, places visited in different ways and predicts patterns and activities/ phenomena	58
E501	Explains the super senses and unusual features (sight, smell, hear, sleep, sound, etc.) of animals and their responses to light, sound, food etc	53
E503	Describes the interdependence among animals, plants and humans	53
E504	Explains the role and functions of different institutions in daily life (Bank, Panchayat, cooperatives, police station, etc.)	67
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).	45
E506	Groups objects, materials, activities for features/properties such as shape, taste, colour , texture, sound, traits etc.	45
E507	Traces the changes in practices, customs, techniques of past and present through coins, paintings, monuments, museum etc. and interacting with elders	57
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	49
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	50
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	56
E512	voices opinions on issues observed/experienced and relates practices /happenings to larger issues of society.	51
E513	Suggests ways for hygiene, health, managing waste, disaster/emergency situations and protecting/ saving resources	61
Language		
L504	reads and comprehends independently storybooks, news items/ headlines, advertisements etc.	52
L508	reads text with comprehension, locates details and sequence of events	53
Mathematics		
M401	Applies operations of numbers in daily life situations	60
M412	Explores the area and perimeter of simple geometrical shapes (triangle, rectangle, square) in terms of given shape as a unit	57
M418	Calculates time intervals/duration of familiar daily life events by using forward or backward counting/ addition and subtraction	65
M421	Represent the collected information in tables and bar graphs and draws inferences from these	58
M501	reads and writes numbers bigger than 1000 being used in her/his surroundings	59
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	45
M505	finds the number corresponding to part of a collection	52
M506	identifies and forms equivalent fractions of a given fraction	45
M508	Converts fractions into decimals and vice versa	56
M509	classifies angles into right angle, acute angle, obtuse angle and represents the same by drawing and tracing	51
M512	relates different commonly used larger and smaller units of length, weight and volume and converts larger units to smaller units and vice versa	58
M513	estimates the volume of a solid body in known units	42
M514	applies the four fundamental arithmetic operations in solving problems involving money, length, mass, capacity and time intervals	49
M515	identifies the pattern in triangular number and square number	46
M516	collects data related to various daily life situations, represents it in tabular form and as bar graphs and interprets it.	57

LO Code	Learning Outcome Class 8	Average Performance (in Percent)
Language		
L813	Read textual/non-textual materials with comprehension and identifies the details, characters, main idea and sequence of ideas and events while reading	41
Mathematics		
M601	Solves problems involving large numbers by applying appropriate operations	37
M606	solves problems on daily life situations involving addition and subtraction of fractions / decimals	38
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.	38
M621	Arranges given/collected information in the form of table, pictograph and bar graph and interprets them	29
M702	Interprets the division and multiplication of fractions	33
M705	Solves problems related to daily life situations involving rational numbers	38
M706	Uses exponential form of numbers to simplify problems involving multiplication and division of large numbers.	35
M707	adds/subtracts algebraic expressions	42
M710	solves problems related to conversion of percentage to fraction and decimal and vice versa	27
M717	finds out approximate area of closed shapes by using unit square grid/ graph sheet	26
M719	Finds various representative values for simple data from her/his daily life contexts like mean, median and mode	46
M721	Interprets data using bar graph such as consumption of electricity is more in winters than summer	29
M801	Generalises properties of addition, subtraction, multiplication and division of rational numbers through patterns	31
M802	Finds rational numbers between two given rational numbers	35
M803	proves divisibility rules of 2, 3,4, 5, 6, 9 and 11	37
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.	37
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	26
M819	draws and interprets bar charts and pie charts	39
Science		
SCI703	Classifies materials and organisms based on properties/characteristics	36
SCI704	Conducts simple investigation to seek answers to queries	35
SCI705	Relates processes and phenomenon with causes	34
SCI708	measures and calculates e.g., temperature; pulse rate; speed of moving objects; time period of a simple pendulum, etc	47
SCI710	plots and interprets graphs	30

LO Code	Learning Outcome Class 8	Average Performance (in Percent)
SCI711	Constructs models using materials from surroundings and explains their working	33
SCI801	Differentiates materials, organism and processes	39
SCI804	Relates processes and phenomenon with causes	35
SCI805	Explains processes and phenomenon	33
SCI807	measures angles of incidence and reflection, etc.	39
SCI811	Applies learning of scientific concepts in day-to-day life	32
SCI813	Makes efforts to protect environment	43
Social Science		
SST605	identifies latitudes and longitudes, e.g., poles, equator, tropics, States/UTs of India and other neighbouring countries on globe and the world map	36
SST610	locates important historical sites, places on an outline map of India	24
SST625	describes the functioning of rural and urban local government bodies in sectors like health and education	20
SST703	explains preventive actions to be undertaken in the event of disasters	42
SST704	describes formation of landforms due to various factors	13
SST722	explains the significance of equality in democracy	30
SST726	describes the process of election to the legislative assembly	47
SST731	explains the functioning of media with appropriate examples from newspapers.	48
SST733	differentiates between different kinds of markets	43
SST734	traces how goods travel through various market places.	37
SST802	describes major crops, types of farming and agricultural practices in her/his own area/state	42
SST805	Locates distribution of important minerals e.g. coal and mineral oil on the world map	34
SST807	Justifies judicious use of natural resources	45
SST809	draws interrelationship between types of farming and development in different regions of the world	25
SST810	Distinguishes the modern period from the medieval and the ancient periods through the use of sources	38
SST815	Explains the origin, nature and spread of the revolt of 1857 and the lessons learned from it	34
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	14
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	34
SST823	Applies the knowledge of the Fundamental Rights to find out about their violation, protection and promotion in a given situation	29
SST827	Describes the process of making a law. (e.g. Domestic Violence Act, RTI Act, RTE Act)	39
SST831	Identifies the role of Government in providing public facilities such as water, sanitation, road, electricity etc., and recognizes their availability	25
SST833	Draws bar diagram to show population of different countries/India/states	42

CORE TEAM

MHRD

- Shri. Anil Swarup, Secretary, School Education and Literacy (SE&L)
- 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
- Prof. Veer Pal Singh
- Prof. A.D. Tewari
- 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 school year or course of learning. 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.