विद्यया ऽ मृतमश्नुते
एन सी ई आर टी
NCERT

सत्यमेव जयते

सर्व शिक्षा अभियान
सब पढ़ें सब बढ़ें

NAS 2017
NATIONAL ACHIEVEMENT SURVEY
Class : 3, 5 and 8

MADHYA PRADESH
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.

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EDUCATIONAL SURVEY DIVISION
राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
National Council of Educational Research and Training
Sri Aurobindo Marg, New Delhi - 110016

unicef

HIGHLIGHTS

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

62%	65%	70%
Mathematics	EVS	Language

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

48%	56%	56%
Mathematics	EVS	Language

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

55%	40%	43%	44%
Language	Mathematics	Science	Social Science

91%
Children could understand what the teacher says in the classroom.

30%
of the school buildings need significant repair.

Highest Performing Learning Outcomes

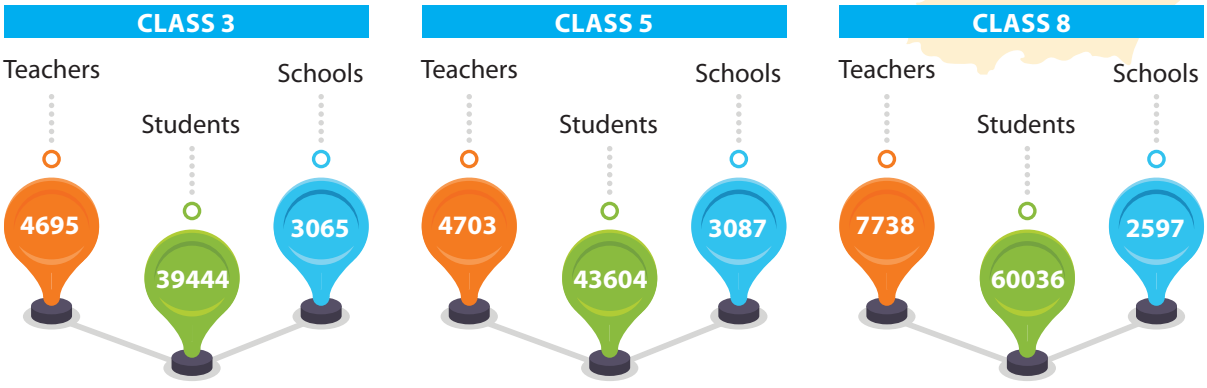
- **M319:** Records data using tally marks, represents pictorially and draws conclusions (73)
- **E314:** Voices opinion on good/bad touch, stereotypes for tasks/play/food in family w.r.t gender, misuse/wastage of food and water in family and school (73)
- **M309:** Identifies and makes 2D-shapes by paper folding, paper cutting on the dot grid, using straight lines etc (73)
- **M317:** Reads the time correctly to the hour using a clock/watch (76)
- **M302:** Compares numbers up to 999 based on their place values (77)

Lowest Performing Learning Outcomes

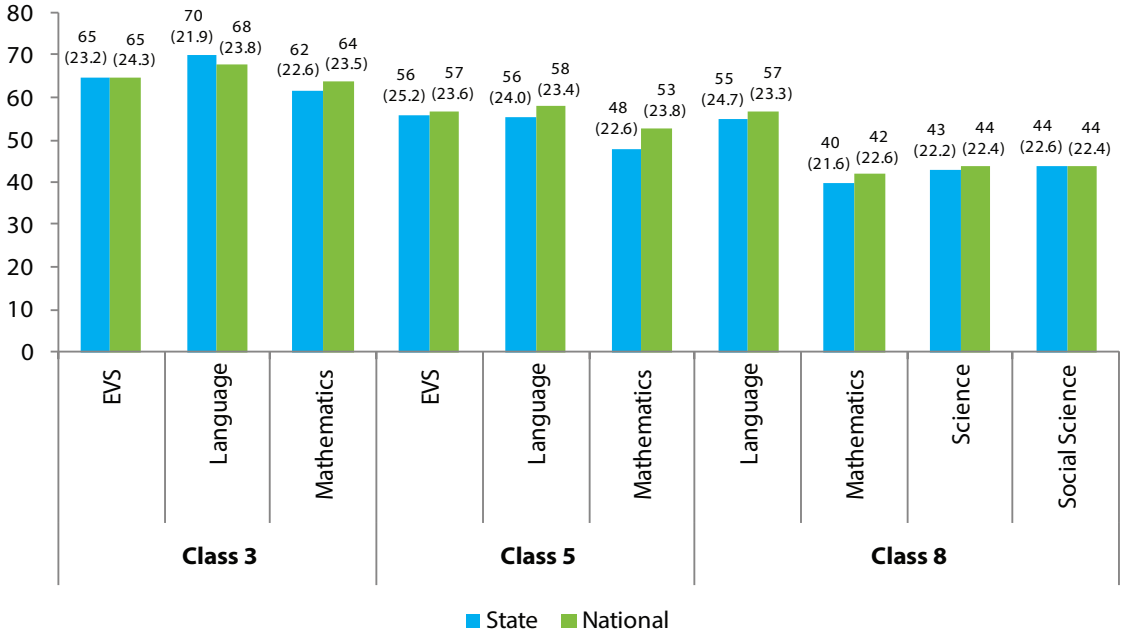
- **M818:** Finds surface area and volume of cuboidal and cylindrical object (20)
- **SST805:** Locates distribution of important minerals e.g. coal and mineral oil on the world map (26)
- **SST625:** Describes the functioning of rural and urban local government bodies in sectors like health and education (27)
- **E313:** Observes rules in games (local, indoor, outdoor) (28)
- **M812:** Verifies properties of parallelogram and establishes the relationship between them through reasoning (29)

Participation

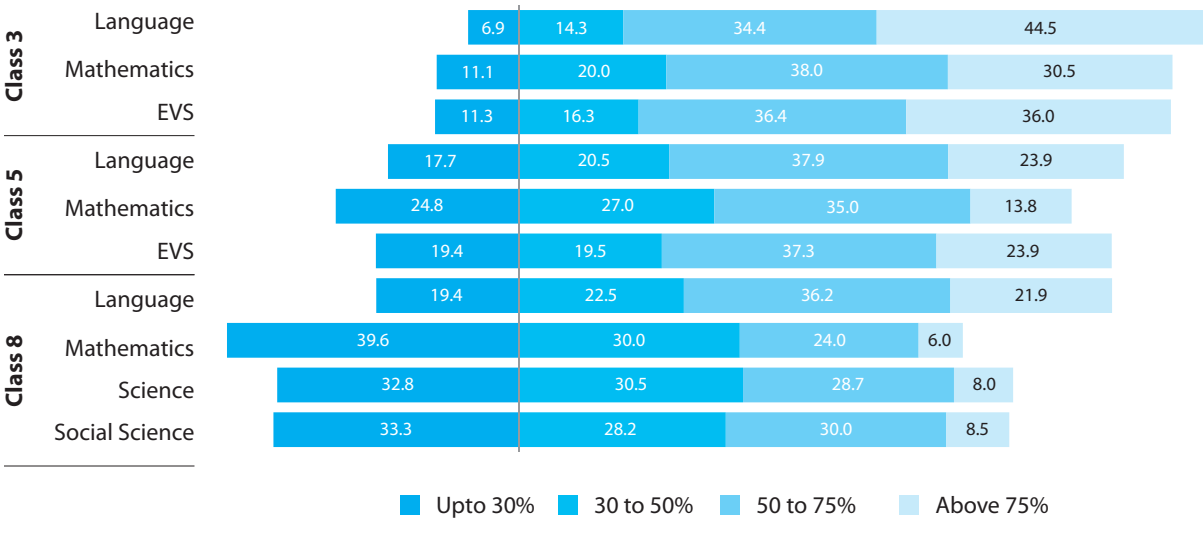
Madhya Pradesh - 51 Districts



Average Achievement by Classes and Subjects



Distribution of Students Achievement by Classes and Subjects

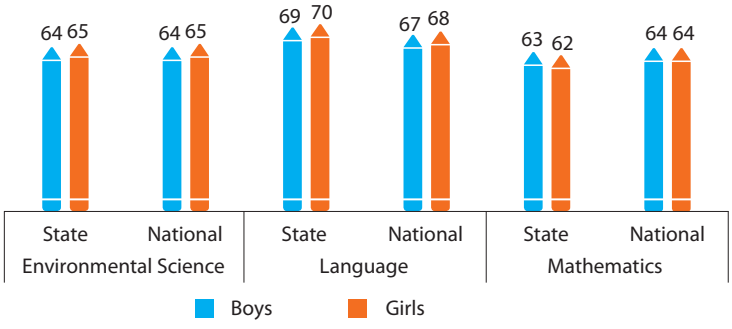


E.g. In Class 3 language, percentage of students achieving upto 30% is 6.9, between 30%-50% is 14.3, between 50%-75% is 34.4 and above 75% is 44.5.

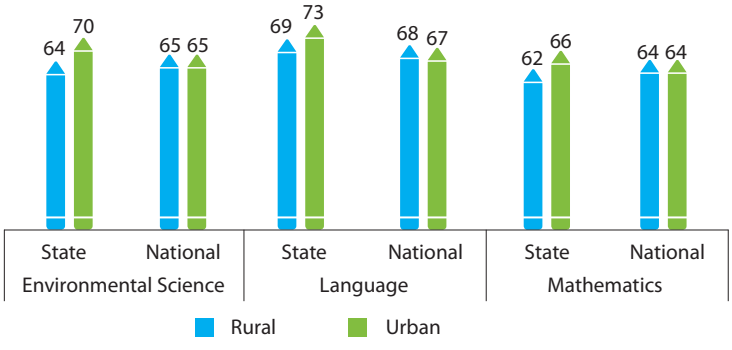
Class 3 State Results by Student Groups

PERFORMANCE

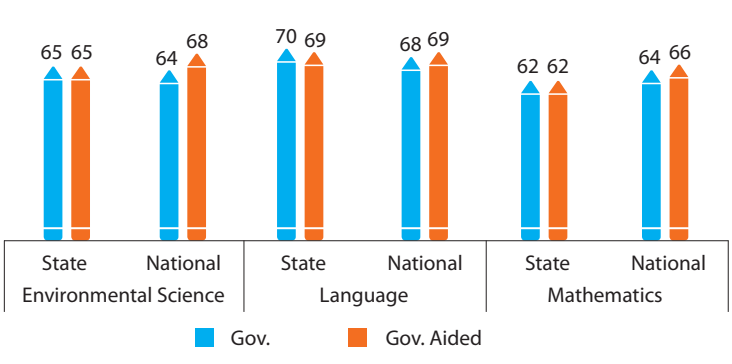
By Gender



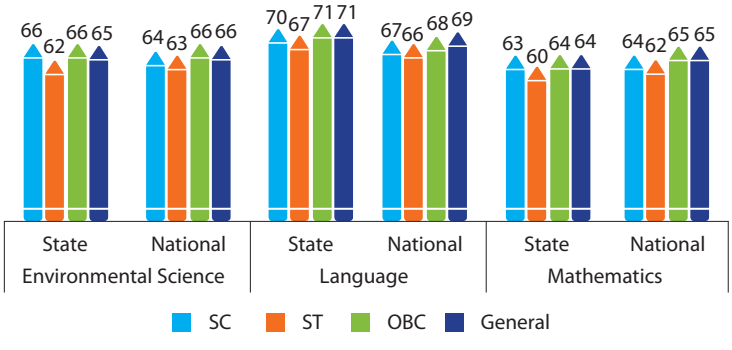
By School Location



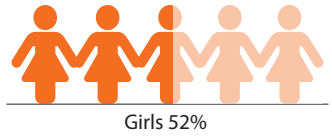
By School Management

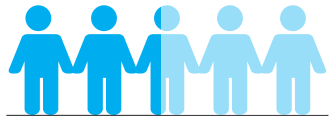


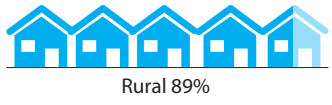
By Social Groups

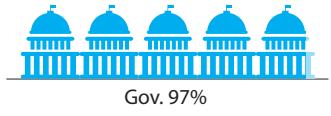


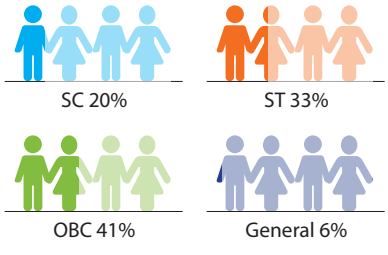
PARTICIPATION







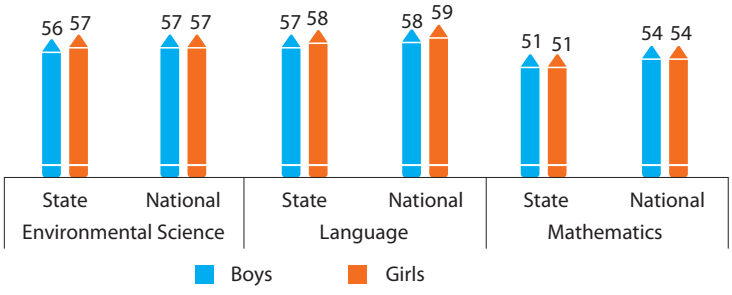




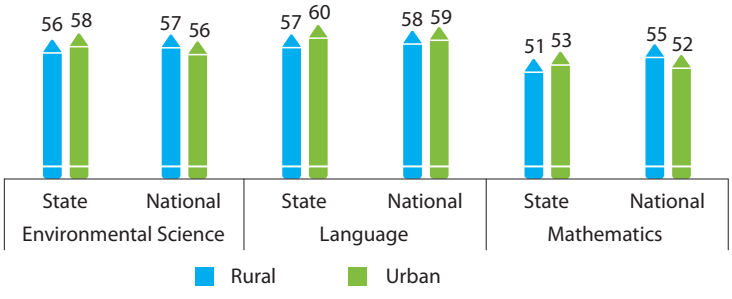
Class 5 State Results by Student Groups

PERFORMANCE

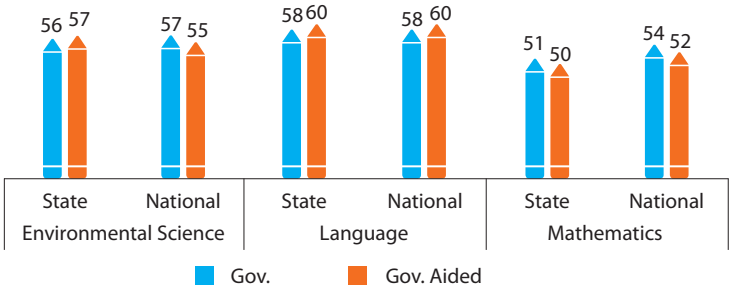
By Gender



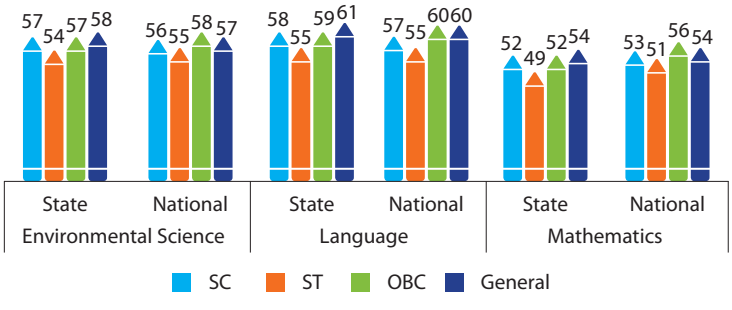
By School Location



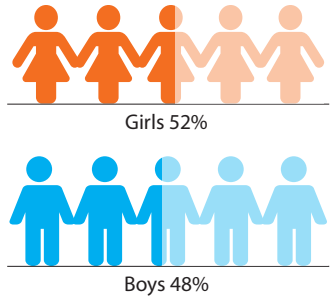
By School Management

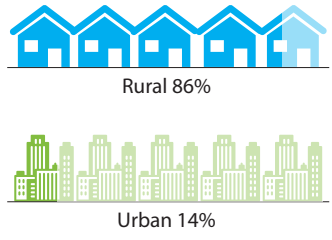


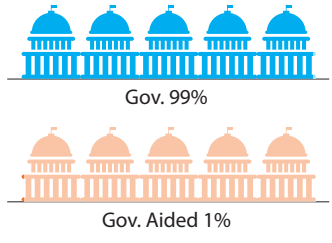
By Social Groups

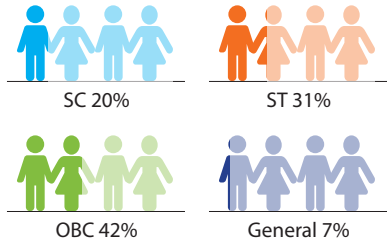


PARTICIPATION





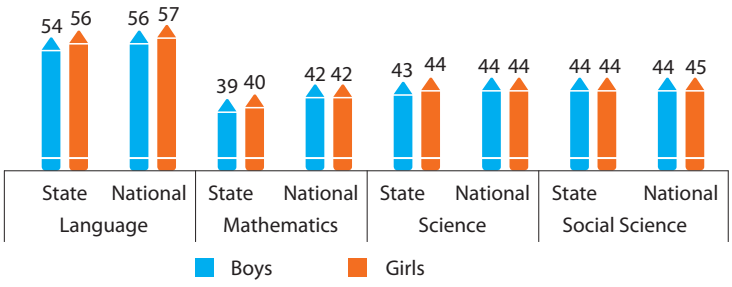




Class 8 State Results by Student Groups

PERFORMANCE

By Gender



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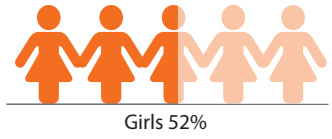
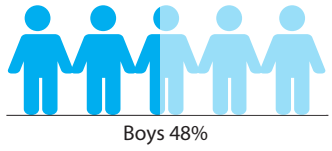
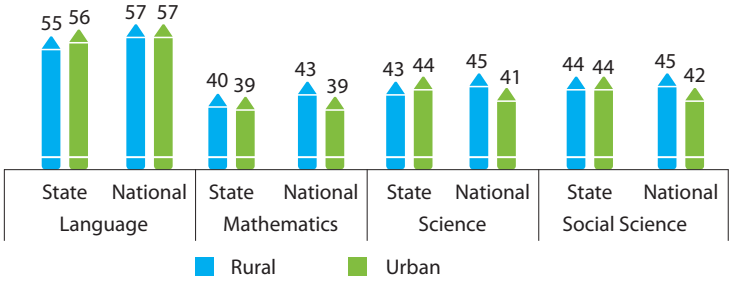
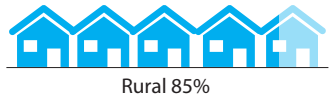


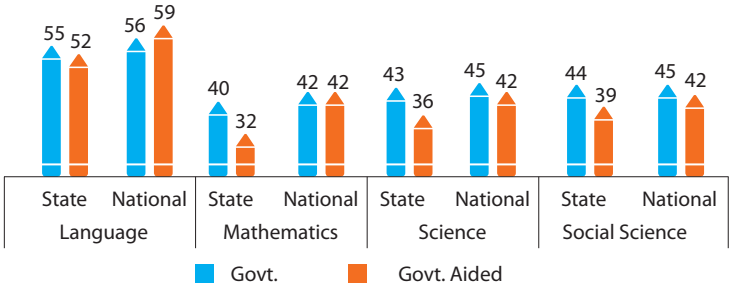


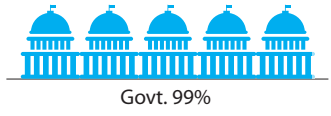
By School Location



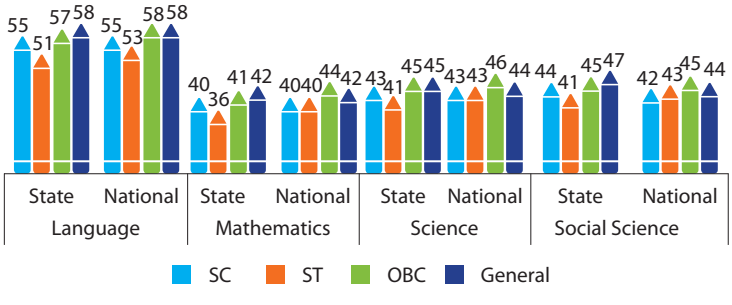


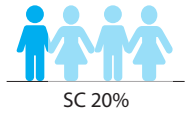
By School Management

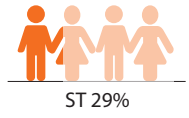


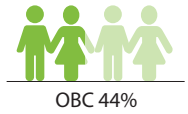


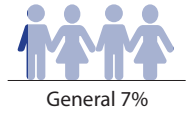
By Social Groups











What children say about schools?

93% children in Class 3, **95%** in Class 5 and **94%** children in Class 8 like to come to school.

18% students in Class 3 and Class 5 and **19%** in Class 8 find it difficult to travel to school.

88% children in Class 3, **90%** in Class 5 and **91%** 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.

80% students in Class 3, **83%** in Class 5 and **81%** students in Class 8 go out and play during the games period.

What teachers responded?

67% teachers in Class 3,

66% in Class 5 and

74% in Class 8 are teaching the same subjects they have pursued during their higher studies.

54% teachers in the state fully understand the curricular goals.

22%
teachers responded that there is lack of adequate toilet facilities.

23%
teachers responded that there is lack of drinking water facilities.

30%
teachers responded that the school buildings needs significant repair.

52%
teachers responded that there is lack of electricity.

19 %
Teachers in the state opined that they are overloaded with work.

41%
Teachers in the state are highly satisfied with their job.

91%
Teachers in the state have adequate instructional material and supplies.

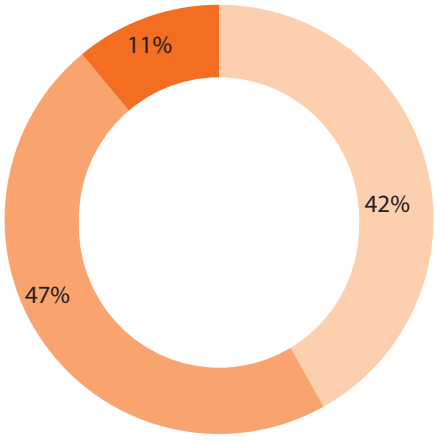
85%
Teachers in the state have adequate work space.

How do teachers assess children in the classroom?

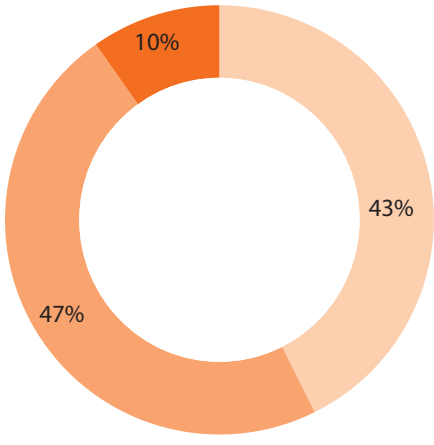
	Never (in %)	For some lessons (in %)	Almost every lesson (in %)
Oral Tests	6	24	70
Written Tests	4	25	71
Multiple choice type	5	26	70
Observation	4	21	75
Home assignments	4	10	86
Student self assessment	13	46	41
Project work	15	60	25
Peer assessment	16	57	27
Portfolio	18	43	38

What teachers say about parent's involvement?

Parental support for students' Achievement



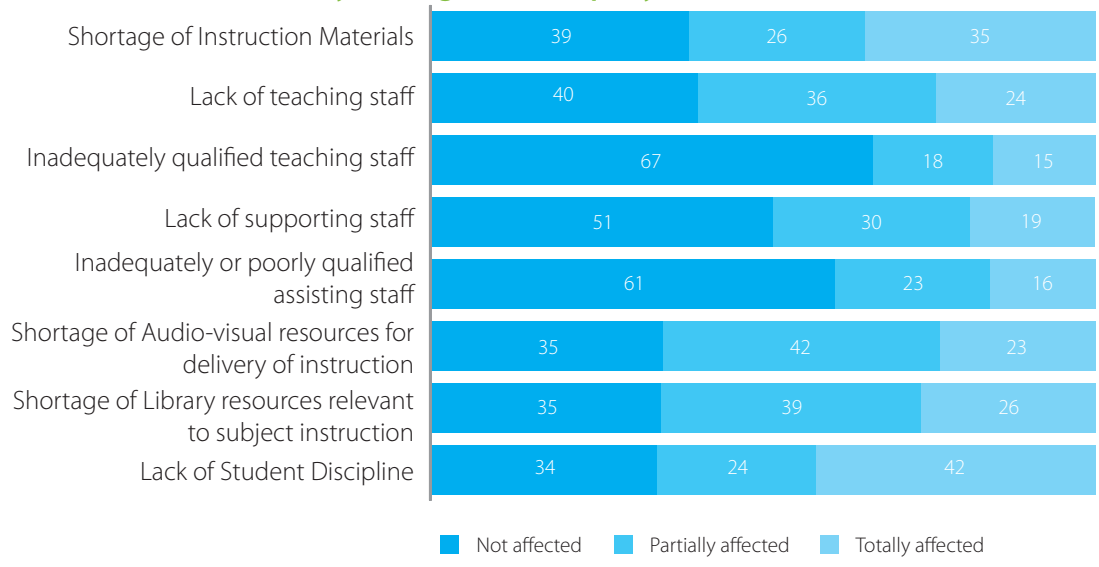
Parental involvement in school activities



Low Medium High

What the head teacher responded?

School activities affected by shortage or inadequacy



E.g. 39% 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
Narsimhapur	77
Sagar	72
Bhopal	72
Agar malwa	72
Dewas	72
Indore	72
Chhatarpur	71
Burhanpur	71
Hoshangabad	70
Shahdol	69
Barwani	69
Khandwa	69
Neemuch	69
Ashoknagar	68
Sehore	68
Gwalior	67
Betul	67
Chhindwara	67
Shajapur	67
Rajgarh	65
Balaghat	65
Tikamgarh	65
Mandla	65
Morena	65
Raisen	65
Jabalpur	65
Mandsaur	65
Shivpuri	64
Umaria	64
Bhind	64
Dindori	63
Ratlam	63
Harda	63
Seoni	63
Guna	63
Damoh	63
Khargone	62
Rewa	62
Anuppur	61
Vidisha	60
Dhar	60
Sheopur	60
Datia	59
Sidhi	59
Jhabua	57
Katni	57
Panna	56
Satna	56
Ujjain	56
Singrauli	54
Alirajpur	53

Class 5

District name	District mean
Narsimhapur	65
Sagar	61
Shahdol	60
Dewas	60
Burhanpur	60
Indore	60
Shajapur	59
Hoshangabad	58
Shivpuri	58
Tikamgarh	58
Rajgarh	57
Khandwa	57
Damoh	57
Chhatarpur	56
Gwalior	56
Bhopal	55
Seoni	55
Barwani	55
Sehore	54
Bhind	54
Harda	54
Balaghat	53
Guna	53
Morena	53
Chhindwara	53
Vidisha	53
Neemuch	53
Mandla	53
Raisen	52
Ashoknagar	52
Jabalpur	51
Betul	51
Khargone	51
Agar malwa	51
Datia	51
Rewa	50
Dindori	50
Sidhi	50
Anuppur	50
Mandsaur	49
Ratlam	48
Sheopur	47
Singrauli	46
Jhabua	46
Umaria	46
Ujjain	46
Katni	46
Satna	46
Dhar	45
Alirajpur	44
Panna	40

Class 8

District name	District mean
Narsimhapur	64
Sagar	53
Shivpuri	52
Burhanpur	51
Sehore	50
Tikamgarh	50
Bhopal	50
Hoshangabad	49
Dewas	49
Shajapur	48
Neemuch	48
Chhatarpur	48
Ashoknagar	48
Indore	47
Damoh	47
Shahdol	46
Balaghat	46
Jabalpur	46
Morena	46
Guna	46
Agar malwa	45
Rajgarh	45
Khandwa	45
Khargone	45
Bhind	44
Rewa	43
Raisen	43
Ratlam	43
Barwani	43
Seoni	43
Sidhi	43
Anuppur	43
Mandsaur	43
Datia	43
Mandla	42
Chhindwara	42
Satna	41
Umaria	41
Betul	40
Gwalior	40
Sheopur	40
Dindori	40
Ujjain	39
Dhar	39
Harda	39
Singrauli	38
Vidisha	37
Katni	37
Alirajpur	37
Jhabua	36
Panna	36

Performance of the State in Learning Outcomes (LOs)

Annex-1

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	56
E303	Identifies relationships with and among family members	63
E304	Identifies objects, signs (vessels, stoves, transport, means of communication, transport, signboards etc.), places (types of houses/shelters, bus stand, petrol pump etc.) activities (work 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	65
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)	67
E309	Identifies directions, location of objects/places in simple maps using signs/symbols/verbally	56
E310	Guesses properties, estimates quantities of materials/ activities in daily life and verifies using symbols/non-standard units	70
E311	Records observations, experiences, information on objects/ activities/places visited in different ways and predicts patterns etc	55
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	73
Language		
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	67
Mathematics		
M301	Reads and writes numbers upto 999 using place value	52
M302	Compares numbers up to 999 based on their place values	77

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	55
M304	Constructs and uses the multiplication facts (up till 10) in daily life situations	66
M305	Analyses and applies an appropriate number of operations in the situation/ context	57
M306	Explains the meaning of division facts by equal grouping/ sharing and finds it by repeated subtraction	61
M309	Identifies and makes 2D-shapes by paper folding, paper cutting on the dot grid, using straight lines etc	73
M311	Fills a given region leaving no gaps using a tile of a given shape	41
M312	Estimates and measures length and distance using standard units like centimetres or metres & identifies relationships	33
M317	Reads the time correctly to the hour using a clock/watch	76
M318	Extends patterns in simple shapes and numbers	54
M319	Records data using tally marks, represents pictorially and draws conclusions	73

LO Code	Learning Outcome Class 5	Average Performance (in Percent)
EVS		
E403	Identifies relationship with and among family members in extended family	59
E410	Records observations/experiences/information for objects, activities, phenomena, places visited in different ways and predicts patterns and activities/ phenomena	56
E501	Explains the super senses and unusual features (sight, smell, hear, sleep, sound, etc.) of animals and their responses to light, sound, food etc	60
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.)	66
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).	30
E506	Group objects, materials, activities for features/properties such as shape, taste, colour, texture, sound, traits etc.	43
E507	Traces the changes in practices, customs, techniques of past and present through coins, paintings, monuments, museums etc. and interacting with elders	50
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	52
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	49
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	50
E512	Voice opinions on issues observed/experienced and relates practices /happenings to larger issues of society.	56
E513	Suggests ways for hygiene, health, managing waste, disaster/ emergency situations and protecting/saving resources	65
Language		
L504	Reads and comprehends independently storybooks, news items/ headlines, advertisements etc	53
L508	Reads text with comprehension, locates details and sequence of events	56

LO Code	Learning Outcome Class 5	Average Performance (in Percent)
Mathematics		
M401	Applies operations of numbers in daily life situations	34
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	63
M421	Represent the collected information in tables and bar graphs and draws inferences from these	51
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	46
M505	Finds the number corresponding to part of a collection	50
M506	Identifies and forms equivalent fractions of a given fraction	37
M508	Converts fractions into decimals and vice versa	45
M509	Classifies angles into right angle, acute angle, obtuse angle and represents the same by drawing and tracing	49
M512	Relates different commonly used larger and smaller units of length, weight and volume and converts larger units to smaller units and vice versa	55
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	41
M516	Collects data related to various daily life situations, represents it in a tabular form and as bar graphs and interprets it	58

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 the ideas and events while reading	54
	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	44
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	39
M621	Arranges given/collected information in the form of table, pictograph and bar graph and interprets them	37
M702	Interprets the division and multiplication of fractions	36
M705	Solves problems related to daily life situations involving rational numbers	37
M706	Uses exponential form of numbers to simplify problems involving multiplication and division of large numbers	39
M707	Adds/subtracts algebraic expressions	49
M710	Solves problems related to conversion of percentage to fraction and decimal and vice versa	34
M717	Finds out approximate area of closed shapes by using unit square grid/ graph sheet	32
M719	Finds various representative values for simple data from her/ his daily life contexts like mean, median and mode	42
M721	Interprets data using bar graph such as consumption of electricity is more in winters than summer	37
M801	Generalises properties of addition, subtraction, multiplication and division of rational numbers through patterns	30
M802	Finds rational numbers between two given rational numbers	36
M803	Proves divisibility rules of 2, 3, 4, 5, 6, 9 and 11	50
M804	Finds squares, cubes, square roots and cube roots of numbers using different methods	48
M808	Use various algebraic identities in solving problems of daily life	39
M812	Verifies properties of parallelogram and establishes the relationship between them through reasoning	29
M818	Finds surface area and volume of cuboidal and cylindrical object	20
M819	Draws and interprets bar charts and pie charts	36

LO Code	Learning Outcome Class 8	Average Performance (in Percent)
Science		
SCI703	Classifies materials and organisms based on properties/ characteristics	41
SCI704	Conducts simple investigation to seek answers to queries	31
SCI705	Relates processes and phenomenon with causes	39
SCI708	Measures and calculates e.g., temperature; pulse rate; speed of moving objects; time period of a simple pendulum, etc	53
SCI710	Plots and interprets graphs	34
SCI711	Constructs models using materials from surroundings and explains their working	36
SCI801	Differentiates materials, organism and processes	46
SCI804	Relates processes and phenomenon with causes	36
SCI805	Explains processes and phenomenon	39
SCI807	Measures angles of incidence and reflection, etc	42
SCI811	Applies learning of scientific concepts in day-to-day life	43
SCI813	Makes efforts to protect environment	59
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	46
SST610	Locates important historical sites, places on an outline map of India	40
SST625	Describes the functioning of rural and urban local government bodies in sectors like health and education	27
SST703	Explains preventive actions to be undertaken in the event of disasters	41
SST704	Describes formation of landforms due to various factors	39
SST722	Explains the significance of equality in democracy	37
SST726	Describes the process of election to the legislative assembly	54
SST731	Explains the functioning of media with appropriate examples from newspapers	55
SST733	Differentiates between different kinds of markets	61
SST734	Traces how goods travel through various market places.	55
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	26
SST807	Justifies judicious use of natural resources	48
SST809	Draws inter-relationship between types of farming and development in different regions of the world	33

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	45
SST815	Explains the origin, nature and spread of the revolt of 1857 and the lessons learned from it	47
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	29
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	44
SST823	Applies the knowledge of the Fundamental Rights to find out about their violation, protection and promotion in a given situation	44
SST827	Describes the process of making a law. (e.g. Domestic Violence Act, RTI Act, RTE Act)	44
SST831	Identifies the role of Government in providing public facilities such as water, sanitation, road, electricity etc., and recognizes their availability	39
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 30th June 2018)

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

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

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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.