

Mathematics: Ability-wise Performance

In the category of number system, students were assessed on five basic operations i.e. addition (of 2- and 3- digit numbers), subtraction (of 3-digit numbers with and without borrowing), multiplication (of 2-digit numbers by a single digit), division and number placement. Moreover, they were also given questions on geometry, patterns, measurement, money, and data handling.

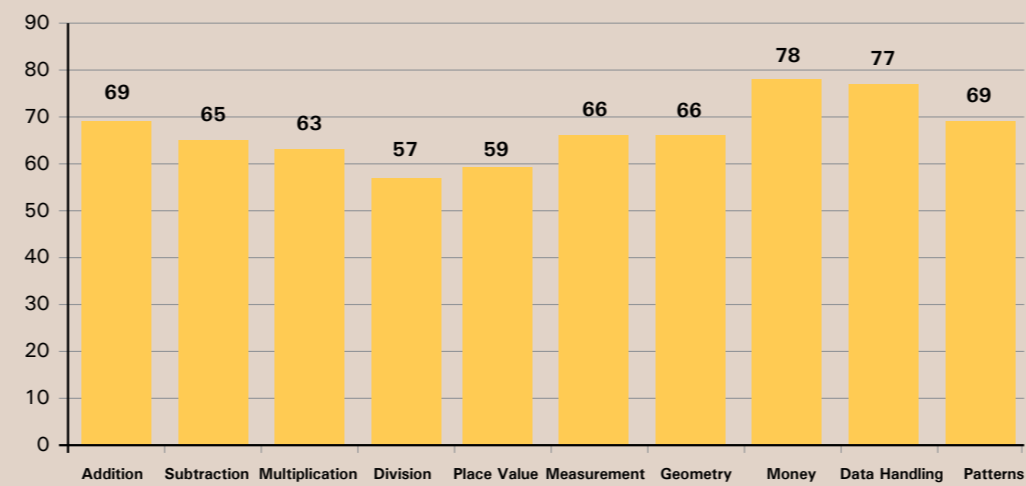
The table below shows the percentage of students who could perform these tasks correctly:

State/UT	Addition	Subtraction	Multiplication	Division	Place Value	Measurement	Geometry	Money	Data Handling	Patterns
A & N Islands	72	61	62	61	48	69	72	79	82	81
Andhra Pradesh	72	67	68	61	64	68	64	82	80	74
Arunachal Pradesh	68	58	51	49	55	63	63	79	75	74
Assam	68	65	66	59	60	65	65	74	73	66
Bihar	63	60	60	51	51	55	50	64	62	52
Chandigarh	62	53	52	51	50	62	60	80	80	76
Chhattisgarh	51	49	51	45	51	55	47	63	65	56
Dadra & Nagar Haveli	79	73	73	66	72	70	78	83	83	77
Daman & Diu	81	70	76	72	73	76	81	89	81	78
Delhi	64	58	63	52	54	63	58	75	75	73
Goa	73	61	61	51	61	66	77	78	78	66
Gujarat	75	70	70	62	64	64	71	74	76	69
Haryana	64	62	62	52	64	61	54	74	72	63
Himachal Pradesh	75	70	68	59	69	67	63	79	80	70
Jammu & Kashmir	61	62	61	55	58	60	65	71	70	64
Jharkhand	69	67	67	57	57	64	59	72	72	65
Karnataka	78	76	68	62	68	72	79	83	86	74
Kerala	76	65	61	57	65	67	75	84	86	81
Madhya Pradesh	68	68	59	56	63	61	53	73	73	65
Maharashtra	68	65	61	59	61	69	73	83	84	71
Manipur	74	69	66	63	72	69	76	80	81	71
Meghalaya	67	60	52	57	62	62	68	84	78	61
Mizoram	76	71	63	61	60	72	77	86	81	73
Nagaland	69	60	55	51	56	66	74	82	79	70
Odisha	64	60	61	55	59	63	61	75	71	63
Puducherry	71	68	68	68	71	76	83	87	89	86
Punjab	77	70	66	56	61	69	77	81	84	73
Rajasthan	60	62	62	52	55	63	56	73	71	62
Sikkim	65	63	60	58	60	70	78	84	82	76
Tamil Nadu	75	71	68	64	68	74	78	85	86	76
Tripura	82	74	66	63	24	74	76	81	84	76
Uttar Pradesh	69	72	69	62	62	67	64	77	75	66
Uttarakhand	63	60	63	57	55	62	56	72	74	68
West Bengal	77	69	58	63	27	71	72	79	81	74
National Average	69	65	63	57	59	66	66	78	77	69

Equal or more than National Average Less than National Average



National Average Performance in Mathematical Abilities



Key Findings:

- **High scores** were obtained in problems based on money, data handling, patterns and addition while **low scores** were obtained in problems based on division and place value
- **Overall, the high scores** in mathematics questions were obtained by southern states (like Kerala, Tamil Nadu, Karnataka), UTs (like Daman & Diu, Dadra & Nagar Haveli and Puducherry), and some North-East States (Tripura and Mizoram)
- **Overall, the low scores** in mathematical questions were obtained by Chhattisgarh, Bihar, Madhya Pradesh, Jammu & Kashmir, Rajasthan, Haryana and Odisha.



National Achievement Survey

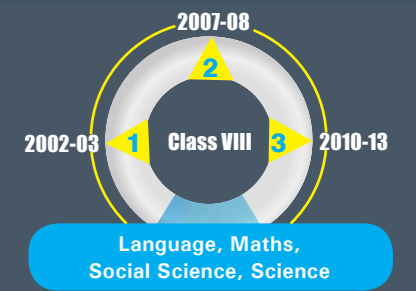
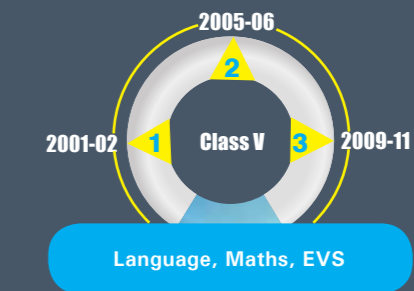
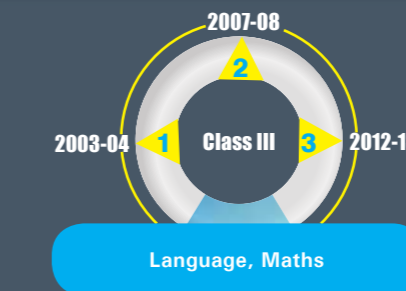
Class III (Cycle 3), 2012-13

Summary of Key Findings

Overview

With the enactment of 'The Right of Children to Free and Compulsory Education' (RTE) Act 2009, government is obligated in ensuring eight years of quality education for all children in the age group 6-14 years. Over the past decade or so since the beginning of the Sarva Shiksha Abhiyan (SSA) programme, there has been a significant increase in the number of schools and in the enrolment of children in government schools, most notably a large proportion of children from among Scheduled Castes, Scheduled Tribes, Muslims and girls have joined the schooling system. Most of these children are also first-generation learners, coupled with the fact that they also come from very impoverished socio-economic backgrounds, which present unique challenges for the education system to adequately support the diverse learning needs of students. While high enrolment and diverse classroom are a sign of healthy inclusion and participation in the education system, it is equally important that all children receive a good quality education. One of the key indicators of quality education is to understand whether children's learning achievement is improving over time in an equitable manner.

To monitor improvement in children's learning levels and to periodically assess the health of the government education system as a whole, the National Council of Educational Research and Training (NCERT) has been periodically conducting National Achievement Surveys (NAS) since 2001, for Class III, V and VIII. The NAS report gives a national and state-level picture, rather than scores for individual students, schools or districts. The purpose of these assessments is to obtain an overall picture of what students in specific classes know and can do, and to use these findings to identify gaps and diagnose areas that need improvement. This information can then be used to impact policies and interventions for improving children's learning under the SSA programme.

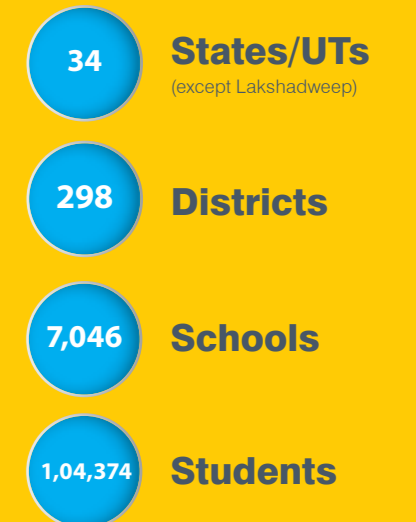


This report summarises the findings of the NAS Class III (Cycle-3) conducted in 2012-13. Some important key features of this survey are highlighted below:

Key Features of the Class III (Cycle 3) study:

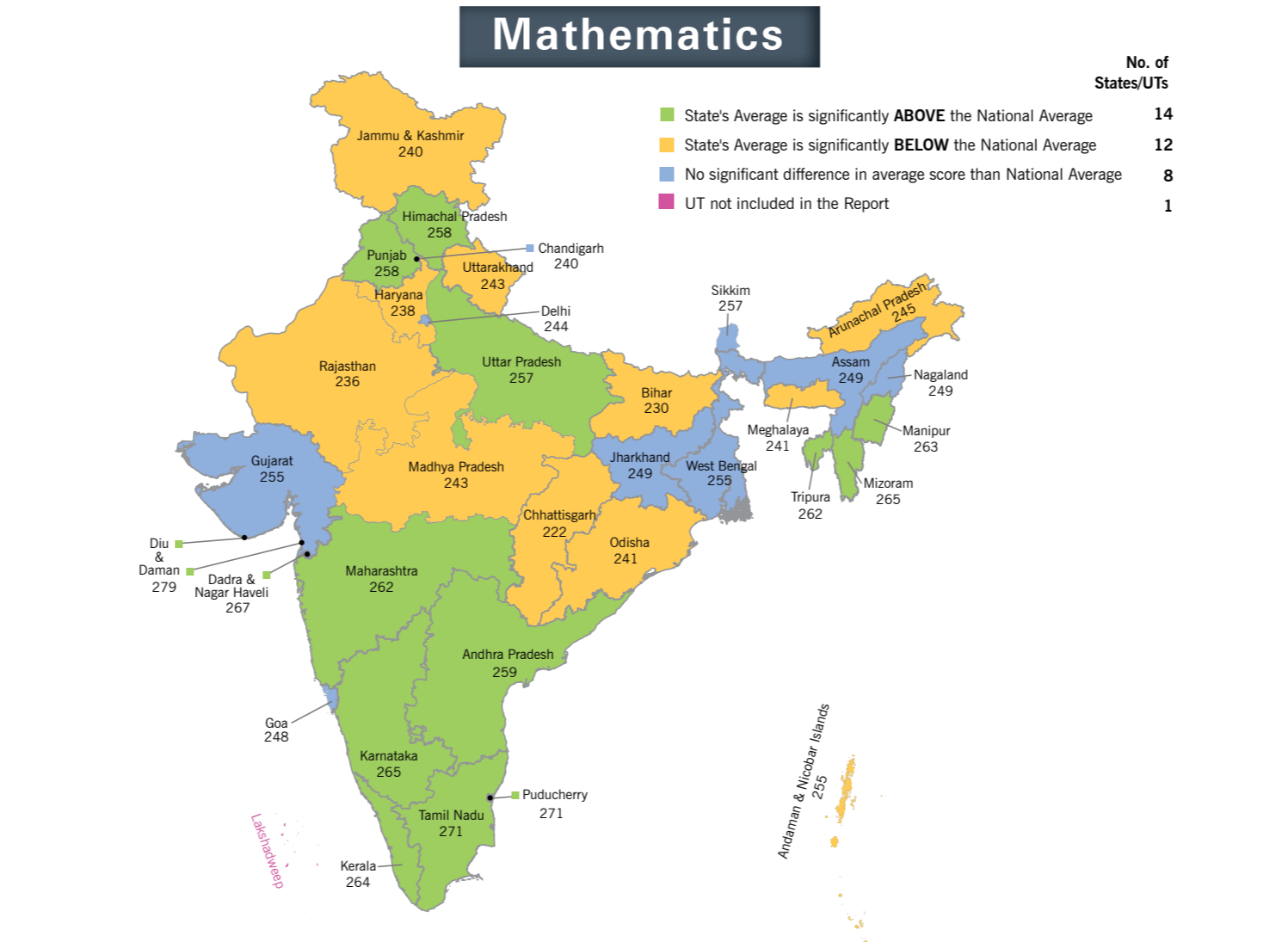
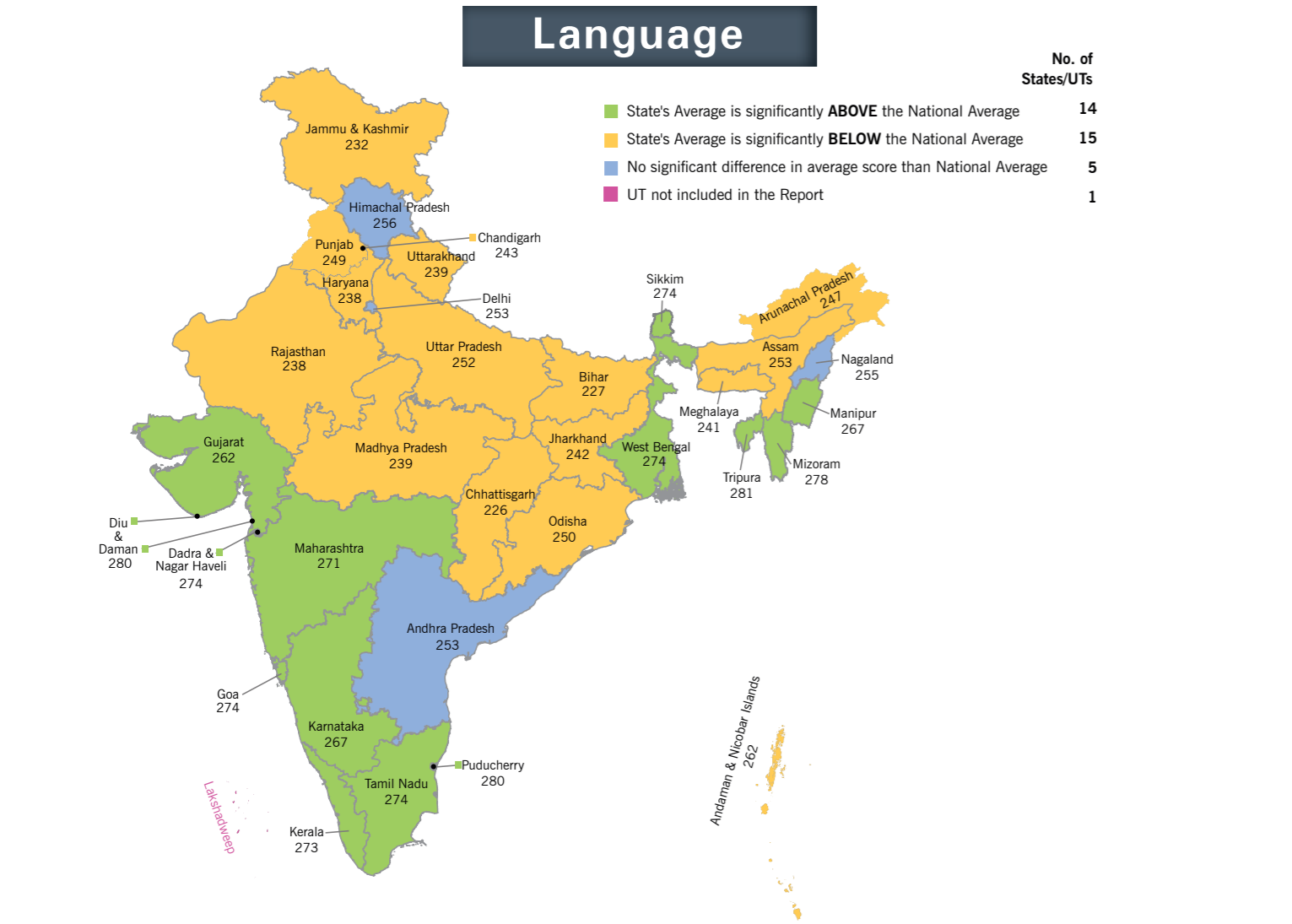
- Assessed student abilities in **Language** (listening, recognition of words and reading comprehension) and in **Mathematics** (numbers, basic operations, measurement, data handling, patterns, money and geometry)
- For the first time, uses international technique of **Item Response Theory (IRT)** for Class III assessments, which measures the true ability of students to respond correctly to different levels of difficulty in tests, allows comparison of scores over time and increases the efficiency, accuracy and usefulness of results
- Conducted tests through **child-friendly manner** like reading questions aloud so children would feel at ease and answer comfortably
- Involved rigorous training and monitoring of field investigators to ensure **quality of data** through standardized test administration
- Standardized tests were administered in **16 languages** of instruction, across the country

Coverage of Class III (Cycle 3) study:





Overall Performance of States



- ▶ Overall, national average score is 257 (on a scale of 0 to 500)
- ▶ **14 states** scored significantly **above** the average, of which the high performing were Tripura, Daman & Diu, Puducherry & Mizoram
- ▶ **15 states** scored significantly **below** the average, of which at the bottom end were Chhattisgarh, Bihar, Jammu & Kashmir, Rajasthan & Haryana
- ▶ In most states there is no significant difference between **boys** and **girls**, except for Madhya Pradesh (boys higher), and Kerala & Puducherry (girls higher)
- ▶ In 27 states there is no significant difference between **rural** and **urban** students, except for Maharashtra and Dadra & Nagar Haveli (rural higher), and Jammu & Kashmir, Jharkhand, Daman & Diu (urban higher)

- ▶ Overall, national average score is 252 (on a scale of 0 to 500)
- ▶ **14 states** scored significantly **above** the average, of which the high performing States/UTs were Tamil Nadu, Daman & Diu
- ▶ **12 states** scored significantly **below** the average, of which the lowest was Chhattisgarh
- ▶ In most states there is no significant difference between **boys** and **girls**, except for Kerala (girls higher)
- ▶ In 27 states there is no significant difference between **rural** and **urban** students, except for Maharashtra and Nagaland (rural higher) and Jammu & Kashmir, Kerala, Madhya Pradesh, Punjab and Daman & Diu (urban higher)



Language: Ability-wise Performance

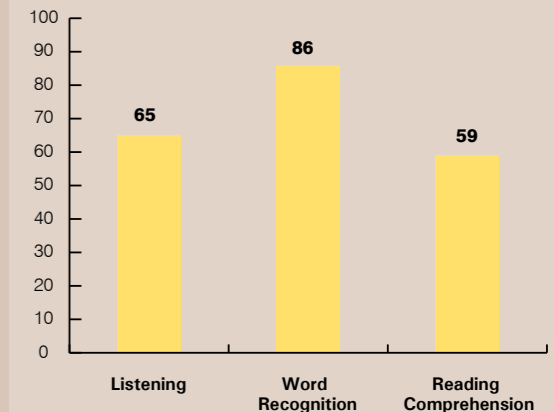
Students were assessed on their abilities in listening (multiple choice questions based on a passage read aloud), word recognition (matching the picture to the correct word from two given options) and reading comprehension (reading a story/advertisement to locate information, interpret and infer).

The table below shows the percentage of class III students who performed these tasks successfully:

States/UTs	Listening	Word Recognition	Reading Comprehension
A&N Islands	67	87	61
Andhra Pradesh	58	88	60
Arunachal Pradesh	57	83	56
Assam	60	84	60
Bihar	56	75	48
Chandigarh	57	84	54
Chhattisgarh	53	80	45
D&N Haveli	71	86	70
Daman & Diu	76	89	69
Delhi	67	87	55
Goa	71	90	67
Gujarat	72	84	61
Haryana	61	83	51
Himachal Pradesh	72	89	58
Jammu & Kashmir	49	78	54
Arkhanda	63	86	52
Karnataka	70	88	65
Kerala	69	91	66
Madhya Pradesh	62	83	52
Maharashtra	71	86	65
Manipur	66	85	66
Meghalaya	69	90	59
Mizoram	76	93	67
Nagaland	65	86	60
Odisha	62	80	58
Puducherry	71	88	71
Punjab	72	89	55
Rajasthan	61	82	52
Sikkim	72	88	67
Tamil Nadu	68	89	68
Tripura	82	91	67
Uttar Pradesh	67	84	58
Uttarakhand	61	86	50
West Bengal	76	90	63
National Average	65	86	59

Equal or more than National Average (Green) Less than National Average (Yellow)

National Average Performance in Language Abilities



Key Findings:

- ▶ **Overall**, 65% of Class III students were able to listen to a passage with understanding, 86% were able to recognize words and 59% were able to read a passage and interpret meanings from it.
- ▶ For **listening**, the high scores (above 70%) were achieved by Tripura, West Bengal, Daman & Diu, Mizoram and Gujarat. The low scores (below 58%) were in Jammu & Kashmir, Chhattisgarh, Bihar, Arunachal Pradesh and Chandigarh.
- ▶ For **word recognition**, the highest performance was by Mizoram, Kerala, Tripura, Goa and Meghalaya, while the lowest was by Bihar, Jammu & Kashmir, Chhattisgarh, Odisha and Rajasthan.
- ▶ For **reading comprehension**, the highest scores were obtained by Puducherry, D&N Haveli, Daman & Diu, Tamil Nadu and Mizoram, while the lowest were obtained by Chhattisgarh, Bihar, Uttarakhand, Haryana and Rajasthan.