Ministry of Education
Government of India

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PARAKH

PARAKH RASHTRIYA SARVEKSHAN 2024

State Report

Goa

शिक्षा मंत्रालय
MINISTRY OF
EDUCATION

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PARAKH RASHTRIYA SARVEKSHAN 2024

STATE REPORT

Goa

PARAKH

Performance Assessment, Review, and Analysis of Knowledge for Holistic Development

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PARAKH Rashtriya Sarvekshan 2024
State Report Goa

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धर्मेन्द्र प्रधान
ଧର୍ମେନ୍ଦ୍ର ପ୍ରଧାନ
Dharmendra Pradhan

शिक्षा मंत्री
भारत सरकार
Minister of Education
Government of India

सत्यमेव जयते

आज़ादी का अमृत महोत्सव



MESSAGE

Education is at the heart of an equitable and inclusive society. The need for an objective assessment of quality education in schools can hardly be over emphasized. PARAKH Rashtriya Sarvekshan 2024 is a significant step in this direction. Unlike the earlier traditional assessments, this survey offers a more detailed picture of what students are learning and how teaching in school systems are supporting the learning process across the country.

The survey provides meaningful insights into classroom practices, teacher's professionalism, and the curriculum implementation by focusing on students' competencies in core subjects and essential skills. With data collected from over 21 lakh students in 74,229 schools, it gives us an opportunity to identify learning gaps, spot regional trends, and highlight practices that are working well.

This initiative aligns with the goals of the National Education Policy (NEP) 2020, which encourages schools to promote creativity, critical thinking, and a more student-centred approach to education. PARAKH Rashtriya Sarvekshan 2024 is a step in that direction-helping us assess and improve what we do in our classrooms every day.

All the teachers, students, school leaders, and officials involved in this exercise deserved to be commended. Their participation and commitment to quality education are truly praiseworthy. I hope this survey findings are used widely and thoughtfully to help build a more equitable, effective, and responsive education system.

(Dharmendra Pradhan)

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जयन्त चौधरी
JAYANT CHAUDHARY

सत्यमेव जयते

कौशल विकास और उद्यमशीलता
राज्य मंत्री (स्वतंत्र प्रभार) एवं
शिक्षा राज्य मंत्री
भारत सरकार
Minister of State (Independent Charge) for
Skill Development and Entrepreneurship
and Minister of State for Education
Government Of India



School education lies at the heart of a nation's progress—it is where foundational values, skills, and aspirations are shaped. The PARAKH Rashtriya Sarvekshan 2024 represents a major step forward in our national journey to strengthen school education through a more informed, inclusive, and responsive approach.

This pioneering initiative goes beyond conventional assessments. It seeks to understand not just what students know, but how schools, teachers, and the broader education system are enabling meaningful learning. By doing so, it reflects a deep commitment to equity, quality, and continuous improvement across all layers of our school education landscape.

What sets PARAKH apart is its ability to empower every stakeholder—from classroom teachers who refine their methods based on feedback, to policymakers who draw on robust data to guide reforms, to community members who advocate for better learning environments. The emphasis on real-world competencies and systemic understanding ensures that assessments are not endpoints, but starting points for responsive and relevant educational action.

The insights from this nationwide survey provide an opportunity to deepen local engagement, design district-specific action plans, and address context-specific challenges. It invites us to move beyond scores and averages and instead pursue holistic, evidence-based solutions that uplift every learner and every region.

PARAKH Rashtriya Sarvekshan 2024 is more than a survey—it is a shared vision for a stronger, more equitable education system. As we move forward, let this effort serve as a foundation for collaboration, innovation, and unwavering commitment to nurturing the potential of every child through high-quality school education.

(Jayant Chaudhary)

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Shri Sanjay Kumar
Secretary

सत्यमेव जयते

Department of School
Education & Literacy,
Ministry of Education
Government of India



MESSAGE

PARAKH Rashtriya Sarvekshan 2024 is a significant step forward in our ongoing efforts to assess and enhance the quality of education in India. This national survey marks a significant milestone in our journey towards educational excellence, reflecting our unwavering commitment to the transformative goals set forth by the National Education Policy (NEP) 2020.

The NEP 2020 envisions an education system that is holistic, flexible, multidisciplinary, and aligned with the needs of the 21st century, aiming to bring out the unique capabilities of each student. Central to this vision is the emphasis on competency-based learning and assessment, ensuring that our students not only acquire knowledge but also develop critical thinking, problem-solving abilities, and a love for lifelong learning. PARAKH Rashtriya Sarvekshan 2024 assessed these competencies across diverse stages of schooling, providing us with invaluable insights into the effectiveness of our educational interventions.

The findings from PARAKH Rashtriya Sarvekshan 2024 help identify both our achievements and the challenges that lie ahead. They provide a clear roadmap for targeted interventions, enabling us to channel our resources and efforts where they are most needed. Moreover, this survey fosters a culture of accountability and continuous improvement, encouraging educators, administrators, and policymakers to collaborate effectively in enhancing the competencies of our students.

Moving beyond the assessment itself, the next phase of this initiative is focused on enabling systemic action. To facilitate this, a comprehensive multi-level strategy has been planned to translate the findings of the PARAKH Rashtriya Sarvekshan 2024 into meaningful actions. This includes a phased dissemination of data through workshops at the national, regional, state, and district levels. These workshops will focus not only on understanding the survey results but also on preparing district-specific roadmaps, where roles and responsibilities are clearly defined. A layered set of interventions—short-, mid-, and long-term—will support this process. These range from teacher training and community engagement to the development of intervention handbooks, digital learning materials, and a Management Information System for continued data use. The integration of survey insights into Annual Work Plans and Budgets (AWPBs) will help embed these efforts into ongoing planning cycles, ensuring that the survey serves as a lever for sustained system strengthening.

Let us celebrate our successes, learn from our shortcomings, and renew our commitment to providing an education that equips our students to navigate and contribute positively to an ever-evolving world.

Shri Anandrao V Patil
Additional Secretary

Department of School
Education & Literacy,
Ministry of Education
Government of India



MESSAGE

Education is not just about imparting knowledge; it is about nurturing minds, shaping perspectives, and equipping students with the skills to navigate an ever-changing world. The PARAKH Rashtriya Sarvekshan 2024 serves as a critical initiative that helps us understand how well we are achieving these objectives. By assessing students' competencies across various educational stages, this survey enables us to measure learning outcomes, evaluate educational policies, and enhance the teaching-learning process in schools across the country.

One of the most significant contributions of this initiative is its role in bridging the gap between assessment and action. The findings from the PARAKH Rashtriya Sarvekshan provide an accurate reflection of student performance, allowing for targeted interventions that cater to the diverse learning needs of children across geographies, socio-economic backgrounds, and linguistic diversities. Furthermore, the survey brings into focus the importance of teacher training, curriculum refinement, and pedagogical innovations in improving learning outcomes.

The National Education Policy 2020 advocates for a shift toward competency-based education, where learning is not just about memorization but about understanding, application, and problem-solving. This survey plays a key role in evaluating this transition, ensuring that students are not only absorbing knowledge but also developing critical skills that will prepare them for future academic and professional challenges.

As we move into the implementation phase, the focus shifts to helping states and districts make effective use of the findings through structured and responsive planning. The post-survey interventions are being designed to support this shift, beginning with detailed workshops that bring together local education officials, academic experts, and practitioners to examine their district-level data in depth. These workshops will inform the creation of action-oriented district plans, tailored to address specific learning needs. Alongside these efforts, practical tools are being developed, such as subject- and stage-specific handbooks, orientation guides for training functionaries, and digital resources, to assist teachers and school leaders in translating insights into instructional practices. The emphasis is on usability, clarity, and adaptability, so that those at the frontlines of education have what they need to respond effectively. These initiatives are not isolated but are being integrated with broader administrative cycles, such as state academic planning and budgeting, to ensure coherence and long-term continuity in interventions.

I would like to express my sincere gratitude to the Secretary (Department of School Education & Literacy), the State Project Directors (SPDs), Directors of SCERTs, and the Principals of State Institutes of Education (SIEs) for their tireless efforts in facilitating the successful execution of this nationwide assessment. Their leadership, commitment, and coordination have been invaluable in ensuring that this initiative reaches schools across the country.

I also extend my gratitude to Central Board of Secondary Education (CBSE) for their valuable support in facilitating the administration of the PARAKH Rashtriya Sarvekshan 2024. Their cooperation in ensuring smooth coordination and execution has contributed to the successful completion of this large-scale assessment.

Prof. Dinesh Prasad Saklani
Director

विद्यया ऽमृतमश्नुते
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NCERT

National Council of Educational
Research and Training



FOREWORD

Education serves as the foundation for a nation's progress, and ensuring its quality, accessibility, and relevance is a continuous endeavour. PARAKH Rashtriya Sarvekshan 2024 is a significant step in this direction, offering a comprehensive, data-driven insight into student learning outcomes, school environments, and educational effectiveness across India. This initiative reflects our commitment to evidence-based reforms, providing key findings that will guide future educational strategies and help bridge gaps in learning.

In an era of rapid socio-economic and technological transformation, education must equip students with competencies that go beyond rote learning. The focus should be on critical thinking, creativity, problem-solving, and adaptability, ensuring that learners are prepared for a dynamic future. The findings from this survey enable schools, teachers, and policymakers to assess how effectively these competencies are being nurtured at different stages of schooling. By analyzing student performance in language, mathematics, science, and social sciences, alongside teacher training, infrastructure, and pedagogical approaches, the survey provides a holistic overview of the current education landscape.

One of the most valuable aspects of PARAKH Rashtriya Sarvekshan 2024 is its role in facilitating targeted interventions. The data collected does not merely identify learning gaps—it serves as a catalyst for informed decision-making, curricular improvements, and teaching innovations. This approach is essential in ensuring that our education system is inclusive, equitable, and aligned with the principles of competency-based learning as envisioned in NEP 2020.

As we analyze and act upon these findings, our collective goal should be to create an education system that is responsive, forward-thinking, and centered on student development. This requires collaboration among educators, policymakers, and communities to implement meaningful changes that enhance both teaching and learning experiences.

Preface

PARAKH Rashtriya Sarvekshan 2024 is a significant step toward understanding and improving student learning outcomes and overall school effectiveness across India. This nationwide survey serves as a comprehensive reflection of the education system, offering valuable insights into how students at different stages of schooling develop competencies and how various factors contribute to their learning experiences. Designed as a large-scale competency-based assessment, the survey provides a structured analysis of student achievement, teacher preparedness, school infrastructure, and pedagogical practices. Through this initiative, we aim to bridge the gap between policy and classroom realities, ensuring that education remains dynamic, inclusive, and aligned with contemporary learning needs.

At the core of this survey is the principle that education should not only focus on content mastery but also on the development of critical thinking, problem-solving, and application-based skills. By examining student performance in language, mathematics, science, and social sciences, the study highlights both areas of progress and challenges that require targeted interventions. The findings provide a deeper understanding of learning trends across different regions and socio-economic backgrounds, emphasizing the need for a more equitable and responsive education system. The survey also explores how teachers are equipped to facilitate meaningful learning, assessing their engagement with professional development programs, use of technology in teaching, and implementation of innovative classroom strategies. The role of school infrastructure and access to digital learning tools is also examined, underscoring the importance of creating an environment that supports holistic education.

One of the key takeaways from this study is the need to transform data into action. The insights gained from the survey must serve as a foundation for informed decision-making, guiding improvements in curriculum design, teacher training, and resource allocation. The assessment is not merely a measurement of where we stand today but a tool to shape the future of education in the country. Strengthening foundational skills, ensuring inclusive learning opportunities, and fostering an adaptive and innovative approach to teaching will be critical in achieving the objectives envisioned under the National Education Policy (NEP) 2020. The findings also emphasize the importance of integrating technology into

learning processes, addressing regional disparities in student performance, and enhancing social-emotional learning to create a more supportive educational framework.

To ensure that the findings of PARAKH Rashtriya Sarvekshan 2024 lead to meaningful interventions, a multi-level post-survey intervention strategy has been planned. Workshops at the national, regional, state, and district levels will be organized to disseminate results, analyze key insights, and develop targeted action plans. These workshops will bring together education department officials, SCERTs, school leaders, and teachers to collectively interpret the survey results, identify learning gaps, and formulate strategies to strengthen the teaching-learning process. The district-level workshops, in particular, will play a crucial role in enabling local functionaries, including teachers, principals, and community stakeholders, to engage with the findings and develop district-specific interventions. These efforts will help in formulating short-, mid-, and long-term strategies aimed at addressing gaps in student learning and enhancing the overall quality of education.

As we look ahead, PARAKH Rashtriya Sarvekshan 2024 stands as a cornerstone for shaping the future of assessment-driven education in India. The journey toward an inclusive, competency-based, and future-ready education system requires sustained commitment and continuous reflection. Through collaboration and innovation, we can ensure that every learner, regardless of background or location, has access to meaningful learning experiences that empower them for life. It is my hope that this report will serve as a catalyst for positive change, fostering an education system that is both forward-looking and deeply rooted in the principles of equity and excellence.

Prof. Indrani Bhaduri
Programme Co-ordinator
CEO and *Head* PARAKH, NCERT

Ministry of Education
Government of India

PARAKH Rashtriya Sarvekshan 2024

PARAKH Rashtriya Sarvekshan 2024 was conducted by PARAKH, NCERT under the aegis of the Department of School Education and Literacy, Ministry of Education, to understand the baseline performance in the development of competencies at the end of the Foundational, Preparatory, and Middle stages at the district level for Grades 3, 6, and 9 respectively. Through Rashtriya Sarvekshan 2024, PARAKH provides a system-level reflection on effectiveness of school education.

State Report: Goa



Languages in which Survey was Administered

ENGLISH, HINDI, KANNADA, KONKANI, MARATHI, URDU



Total Number of Schools Participated		
Grade 3	Grade 6	Grade 9
94	**80**	**95**



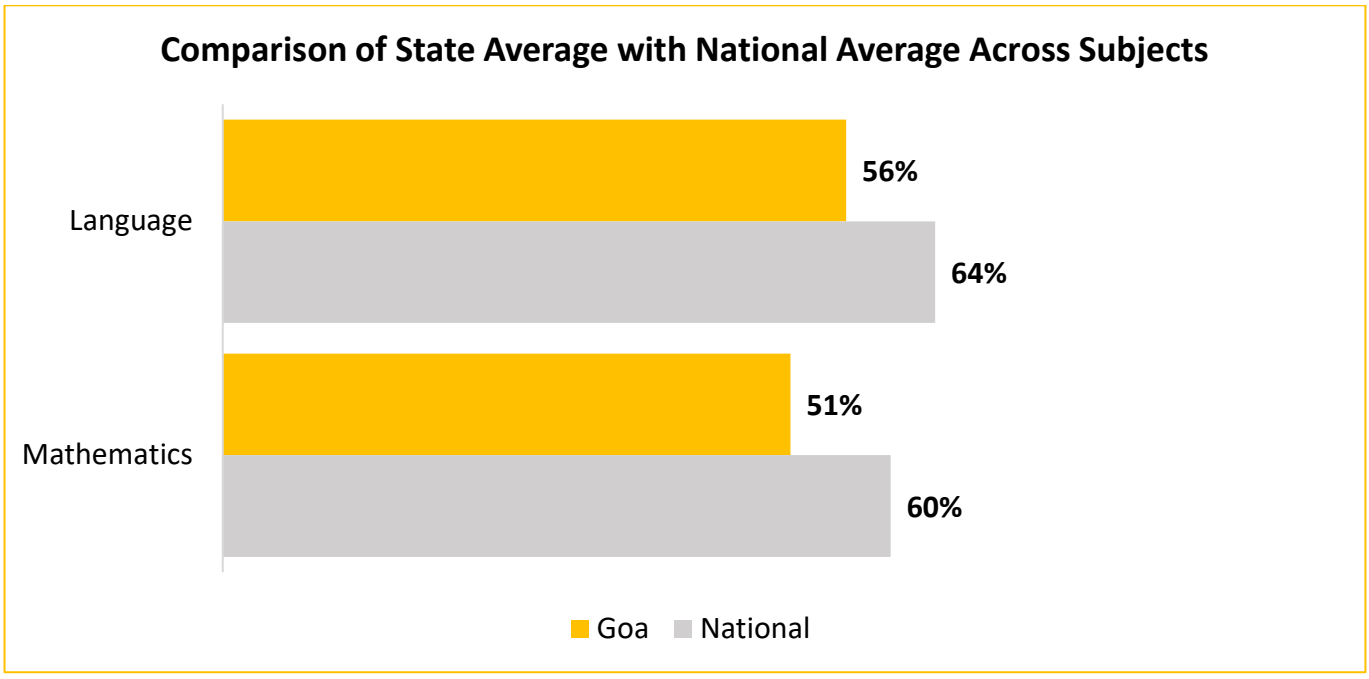
Total Number of Teachers Participated		
Grade 3	Grade 6	Grade 9
254	**239**	**372**



Total Number of Students Participated		
Grade 3	Grade 6	Grade 9
2,015	**2,003**	**2,446**

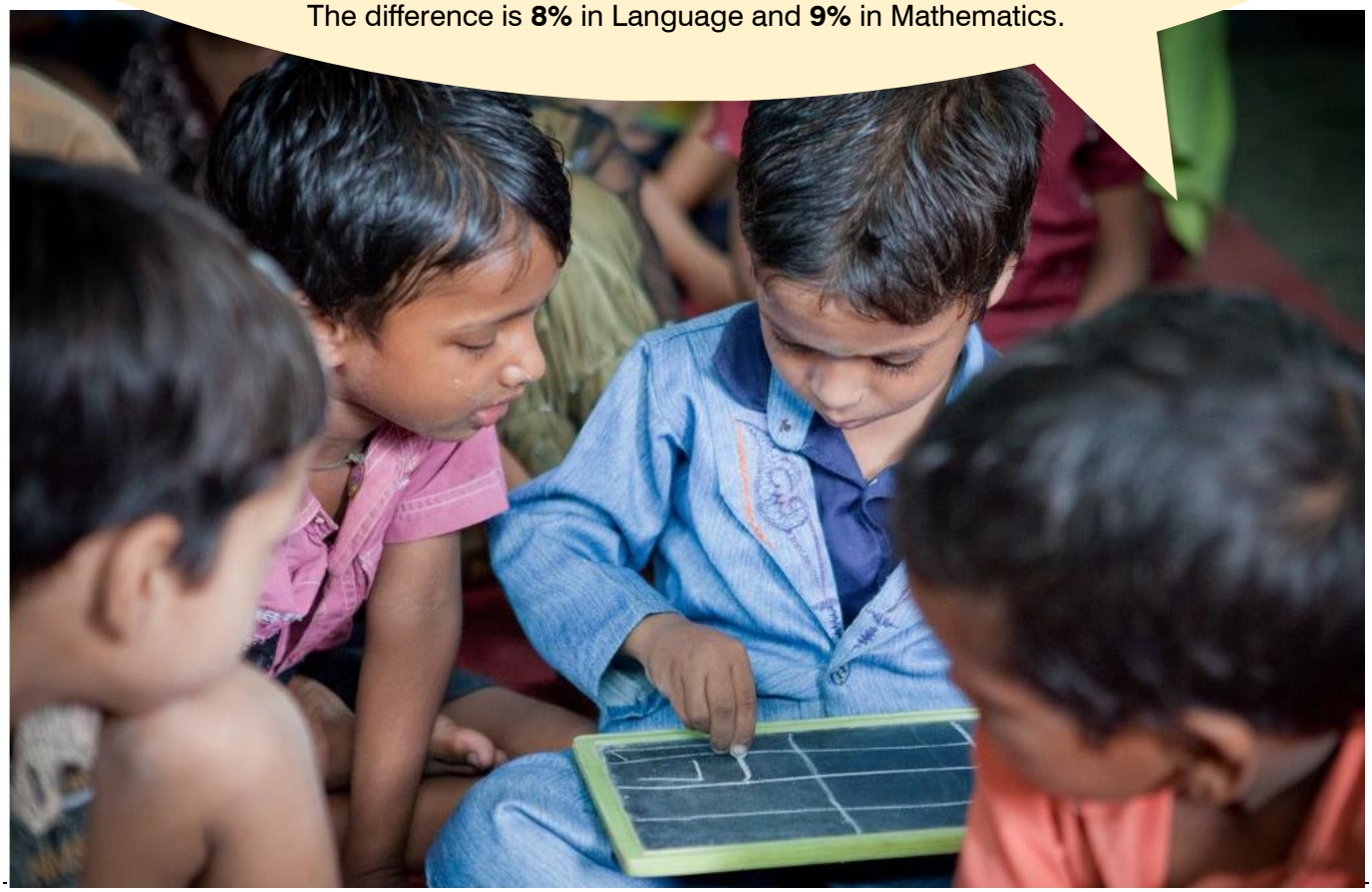


Assessing Foundational Stage Competencies (Grade 3)

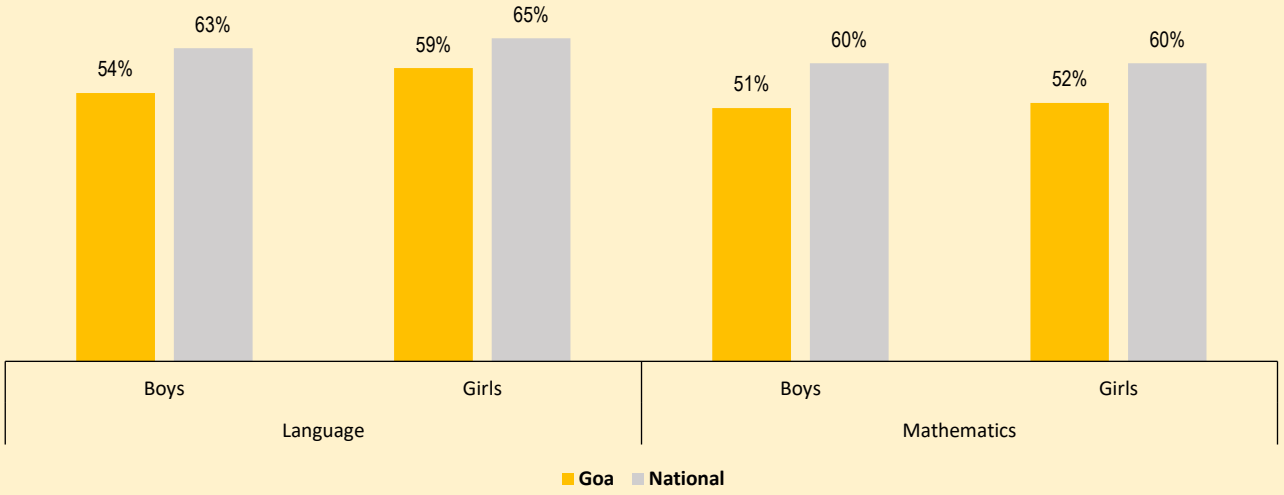


In both **Language** and **Mathematics**, the average performance of students in **Goa** is below the national average.

The difference is **8%** in Language and **9%** in Mathematics.



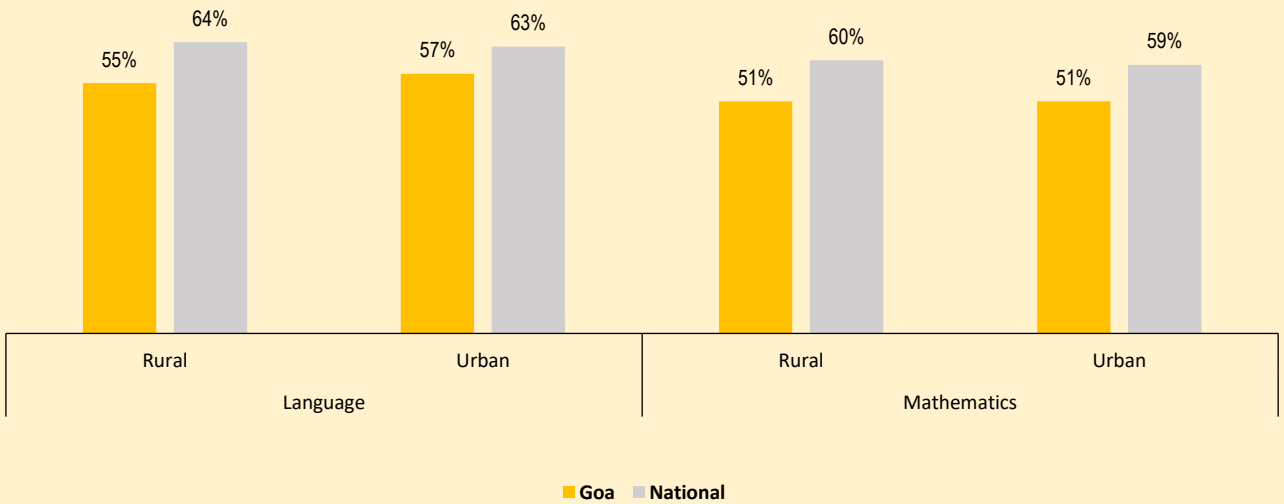
Performance by Gender



Key highlights

- In Language, boys' performance was 9% lower than the national average and girls' performance was 6% lower than the national average.
- In Mathematics, boys' performance was 9% lower than the national average and girls scored 8% lower than the national average.

Performance by Location

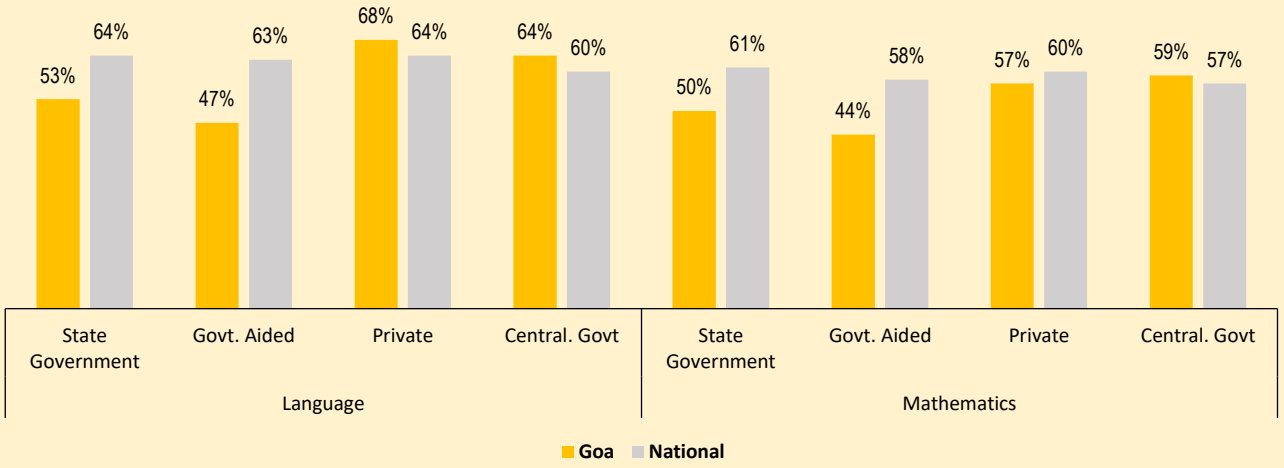


Key highlights

- Students from rural schools performed lower than the national average, with 9% lower score in both Language and Mathematics.
- Students from urban schools performed lower than the national average, with 6% lower score in Language and 8% lower score in Mathematics.

*The mean difference has not been represented statistically.

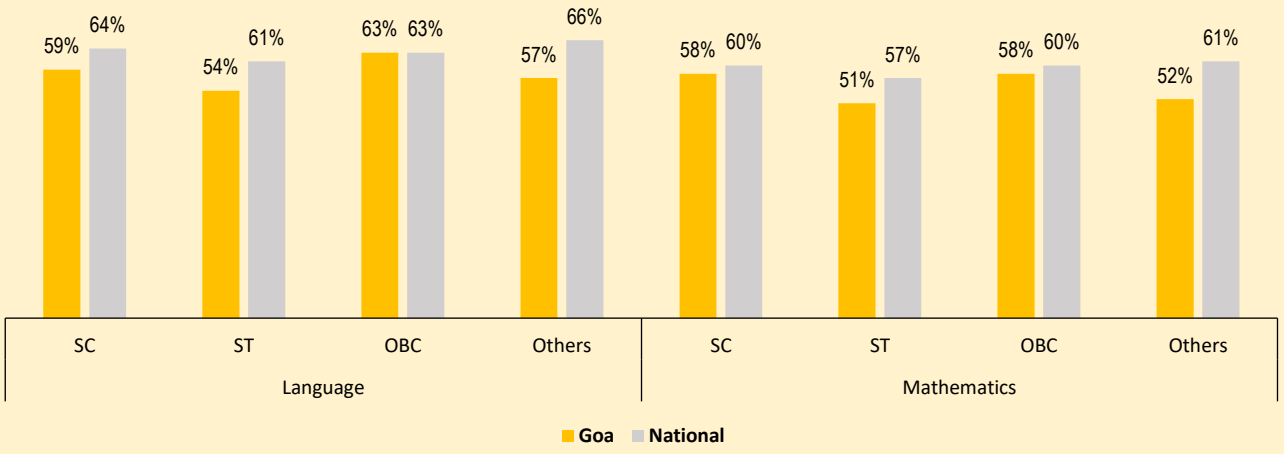
Performance by School Management Type



Key highlights

- State Government schools performed 11% below the national average in both Language and Mathematics.
- Government-aided schools performed below the national average, with students scoring 16% lower in Language and 14% lower in Mathematics.
- Private schools scored 4% higher in Language and 3% lower in Mathematics compare to the national average.
- Central Government schools performed above the national average, with students scoring 4% higher in Language and 2% higher in Mathematics.

Performance by Social Group



Key highlights

- Among SC students, scores were 5% lower in Language and 2% lower in Mathematics than the national average.
- Among ST students, scores were 7% lower in Language and 6% lower in Mathematics than the national average.
- Among OBC students, scores were at par with the national average in Language and 2% lower in Mathematics.
- Among students from other social groups, scores were 9% lower in Language and Mathematics than the national average.

*The mean difference has not been represented statistically.

Competency-wise Performance (Grade 3)

The tables below show the average percentage of correctly answered questions related to each competency in the state, compared to the national average. For example, in competency C-10.7 (Language, Grade 3) in Goa, the state average of 53% represents the proportion of correctly answered questions, while the national average for same competency was 61%.

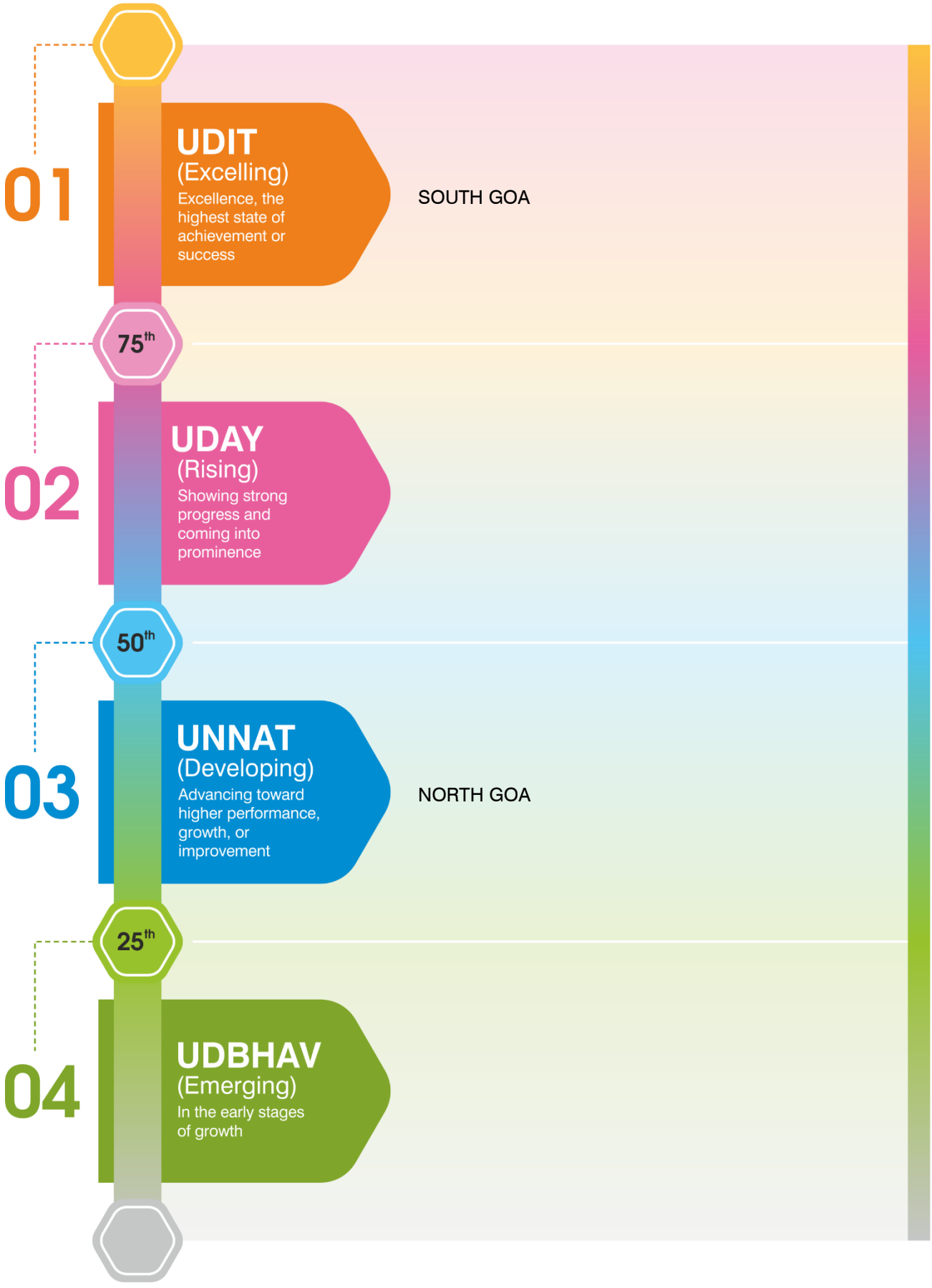
Language

Competency Code	Competency Description	State	National
C-9.7	Knows and uses enough words to carry out day-to-day interactions effectively and can guess the meaning of new words by using existing Vocabulary	60%	67%
C-10.5	Reads short stories and comprehends their meaning - by identifying characters, storyline and what the author wants to say - on their own	52%	60%
C-10.7	Reads and comprehends the meaning of short news items, instructions and recipes, and publicity material	53%	61%

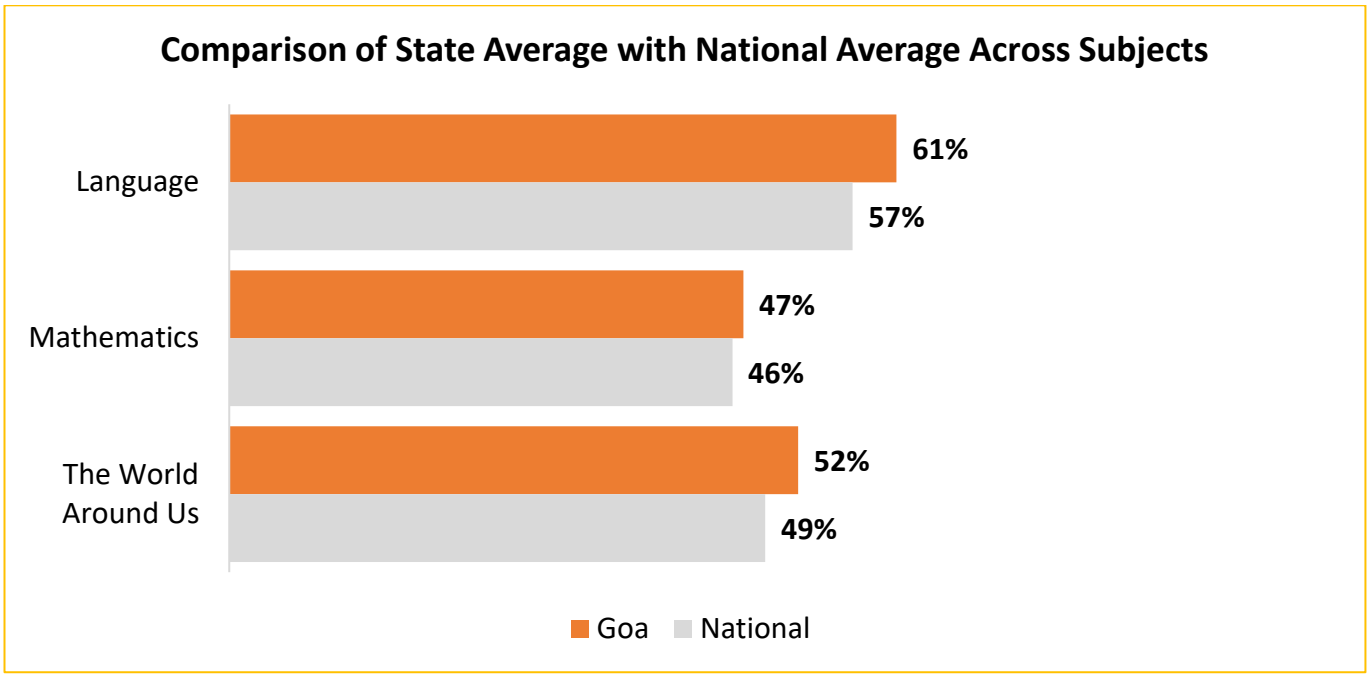
Mathematics

Competency Code	Competency Description	State	National
C-8.1	Sorts objects into groups and sub-groups based on more than one property	62%	68%
C-8.2	Identifies and extends simple patterns in their surroundings, shapes, and numbers	69%	69%
C-8.4	Arranges numbers up to 99 in ascending and descending order	42%	55%
C-8.5	Recognises and uses numerals to represent quantities up to 99 with the understanding of decimal place value system	56%	61%
C-8.6	Performs addition and subtraction of 2-digit numbers fluently using flexible strategies of composition and decomposition of both numerical and word problems	48%	58%
C-8.7	Recognises multiplication as repeated addition and division as equal sharing	37%	54%
C-8.8	Recognises, makes, and classifies basic geometric shapes and their observable properties, and understands and explains the relative relation of objects in space	44%	50%
C-8.9	Selects appropriate tools and units to perform simple measurements of length, weight, and volume of objects in their immediate environment	56%	62%
C-8.10	Performs simple measurements of time in minutes, hours, day, weeks, and months	51%	61%
C-8.11	Performs simple transactions using money up to INR 100	39%	50%
C-8.12	Develops adequate and appropriate vocabulary for comprehending and expressing concepts and procedures related to quantities, shapes, space, and measurements	44%	55%
C-8.13	Formulates and solves simple mathematical problems related to quantities, shapes, space, and measurements	49%	55%

Performance of Districts (in percentile scale) Grade 3



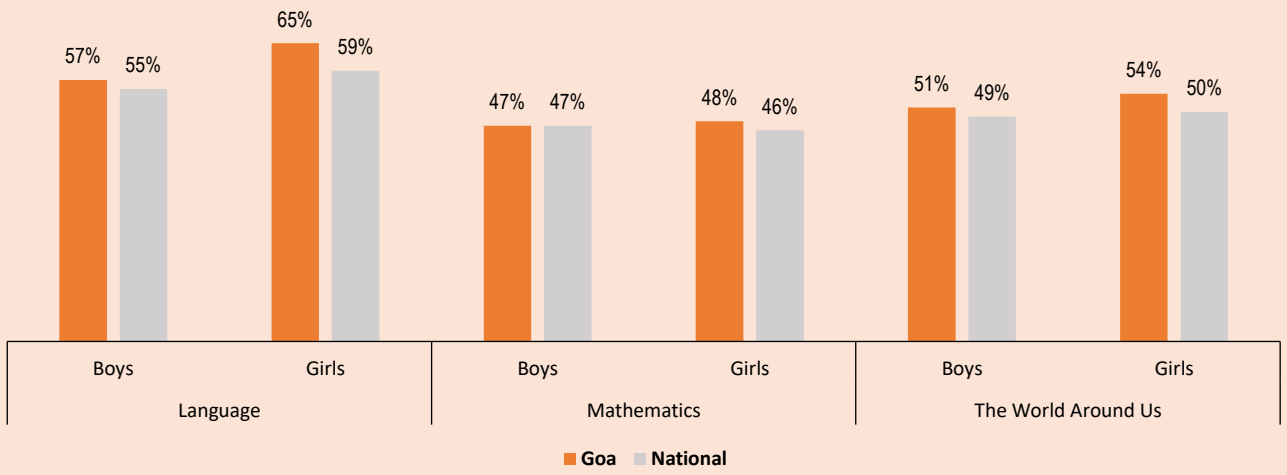
Assessing Preparatory Stage Competencies (Grade 6)





In **Language, Mathematics**, and **The World Around Us,** the average performance of students in Goa is higher than the national average. The performance gap is **4%** in Language, **1%** in Mathematics, and **3%** in The World Around Us.

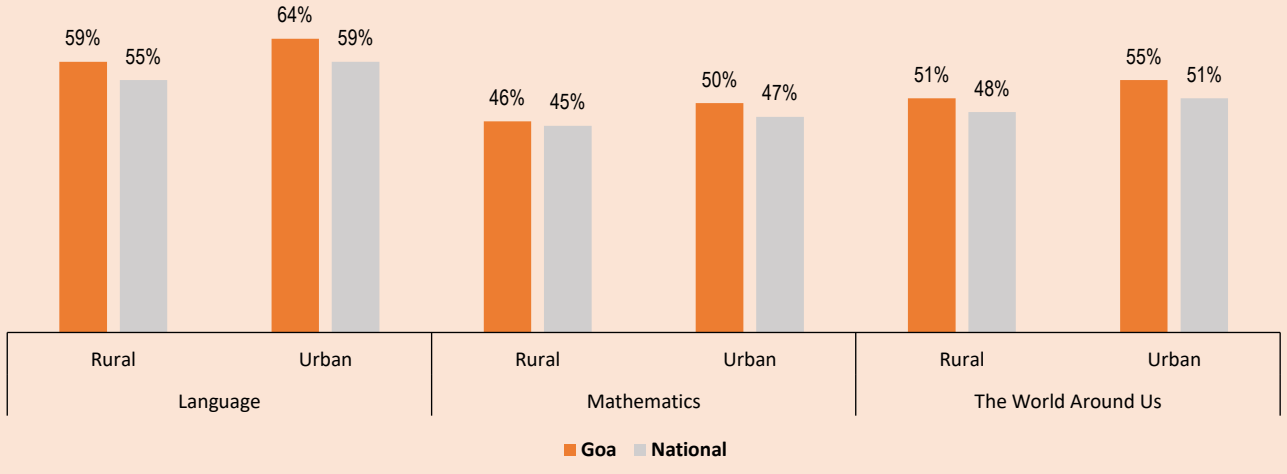
Performance by Gender



Key highlights

- In Language, boys scored 2% higher and girls 6% higher than the national average.
- In Mathematics, boys' performance was at par with the national average. Girls scored 2% above the national average.
- In The World Around Us, boys scored 2% higher, while girls scored 4% higher compared to the national average.

Performance by Location

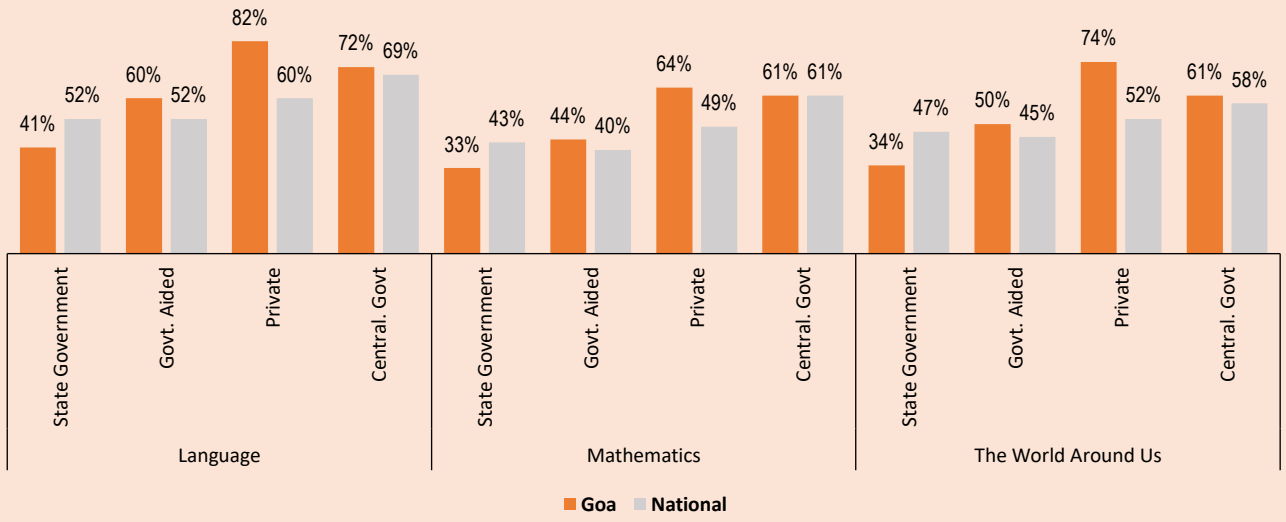


Key highlights

- In rural schools, students scored 4% higher in Language, 1% higher in Mathematics, and 3% higher in The World Around Us than the national average.
- In urban schools, students scored 5% higher in Language, 3% higher in Mathematics, and 4% higher in The World Around Us than the national average.

*The mean difference has not been represented statistically.

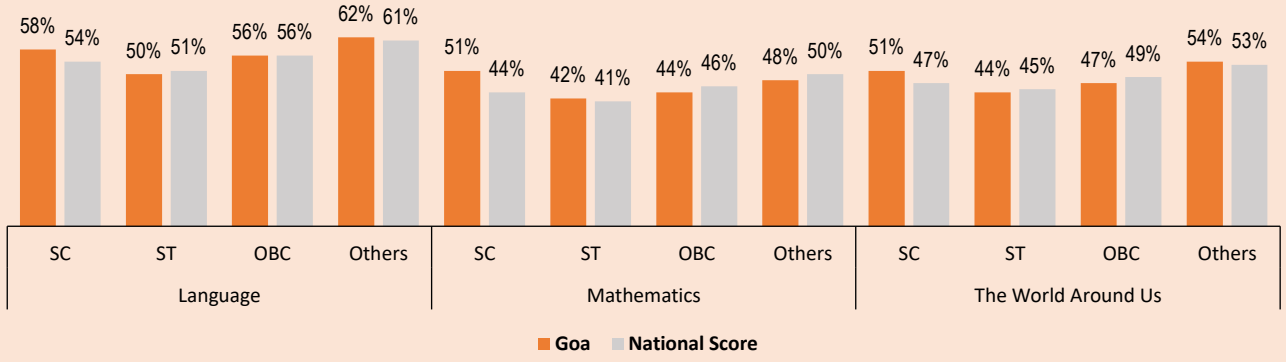
Performance by School Management Type



Key highlights

- In State Government schools, students scored 11% lower in Language, 10% lower in Mathematics, and 13% lower in The World Around Us than the national average.
- In Government-aided schools, students scored 8% higher in Language, 4% higher in Mathematics, and 5% higher in The World Around Us than the national average.
- In Private schools, students scored 22% higher in Language and The World Around Us, and 15% higher in Mathematics compared to the national average.
- In Central Government schools, students scored 3% higher in Language and The World Around Us. The performance was at par with the national average in Mathematics.

Performance by Social Group



Key highlights

- Among SC students, scores were 4% higher in Language and The World Around Us, and 7% higher in Mathematics than the national average.
- Among ST students, scores were 1% lower in Language and The World Around Us, and 1% higher in Mathematics than the national average.
- Among OBC students, scores were 2% lower in Mathematics and The World Around Us. Students' performance was at par with the national average in Language.
- Among students from other social groups, scores were 1% higher in Language and The World Around Us, and 2% lower in Mathematics than the national average.

*The mean difference has not been represented statistically.

Competency-wise Performance (Grade 6)

The tables below show the average percentage of correctly answered questions related to each competency in the state, compared to the national average. For example, in competency C-2.1 (Language, Grade 6) in Goa, the state average of 61% represents the proportion of correctly answered questions, while the national average for same competency was 56%.

Language

Competency Code	Competency Description	State	National
C-2.1	Applies varied comprehension strategies (inference, prediction, visualisation) to understand different texts	61%	56%
C-2.2	Understands main ideas and draws essential conclusions from the material read	61%	58%

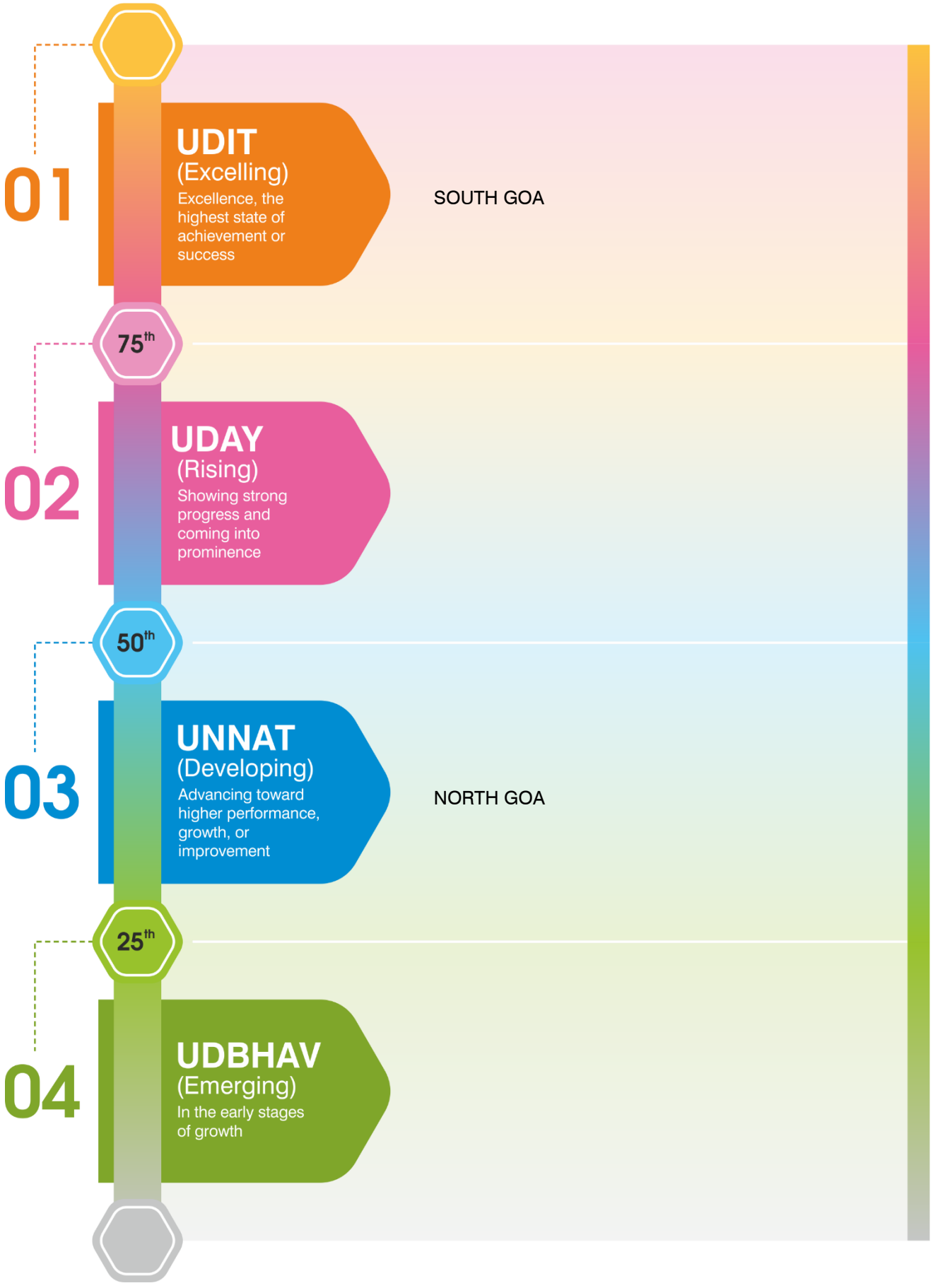
Mathematics

Competency Code	Competency Description	State	National
C-1.1	Represents numbers using the place value structure of the Indian number system, compares whole numbers, and knows and can read the names of very large numbers	59%	54%
C-1.2	Represents and compares commonly used fractions in daily life (such as ½, ¼) as parts of unit wholes, as locations on number lines and as divisions of whole numbers	26%	29%
C-1.3	Understands and visualises arithmetic operations and the relationships among them, knows addition and multiplication tables at least up to 10×10 (Pahade) and applies the four basic operations on whole numbers to solve daily life problems	52%	53%
C-1.4	Recognises, describes, and extends simple number patterns such as odd numbers, even numbers, square numbers, cubes, powers of 2, powers of 10, and Virahanka–Fibonacci numbers.	49%	49%
C-2.2	Describes location and movement using both common language and mathematical vocabulary; understands the notion of map (Najri Naksha)	47%	41%
C-2.4	Discovers, recognises, describes, and extends patterns in 2D and 3D shapes	58%	48%
C-3.3	Carries out simple unit conversions, such as from centimetres to metres, within a system of measurement	34%	38%
C-3.5	Devises strategies for estimating the distance, length, time, perimeter (for regular and irregular shapes), area (for regular and irregular shapes), weight, and volume and verifies the same using standard units	38%	42%
C-4.1	Solves puzzles and daily-life problems involving one or more operations on whole numbers (including word puzzles and puzzles from 'recreational' areas, such as the construction of magic squares)	32%	38%
C-4.3	Selects appropriate methods and tools for computing with whole numbers, such as mental computation, estimation, or paper pencil calculation, in accordance with the context	47%	49%

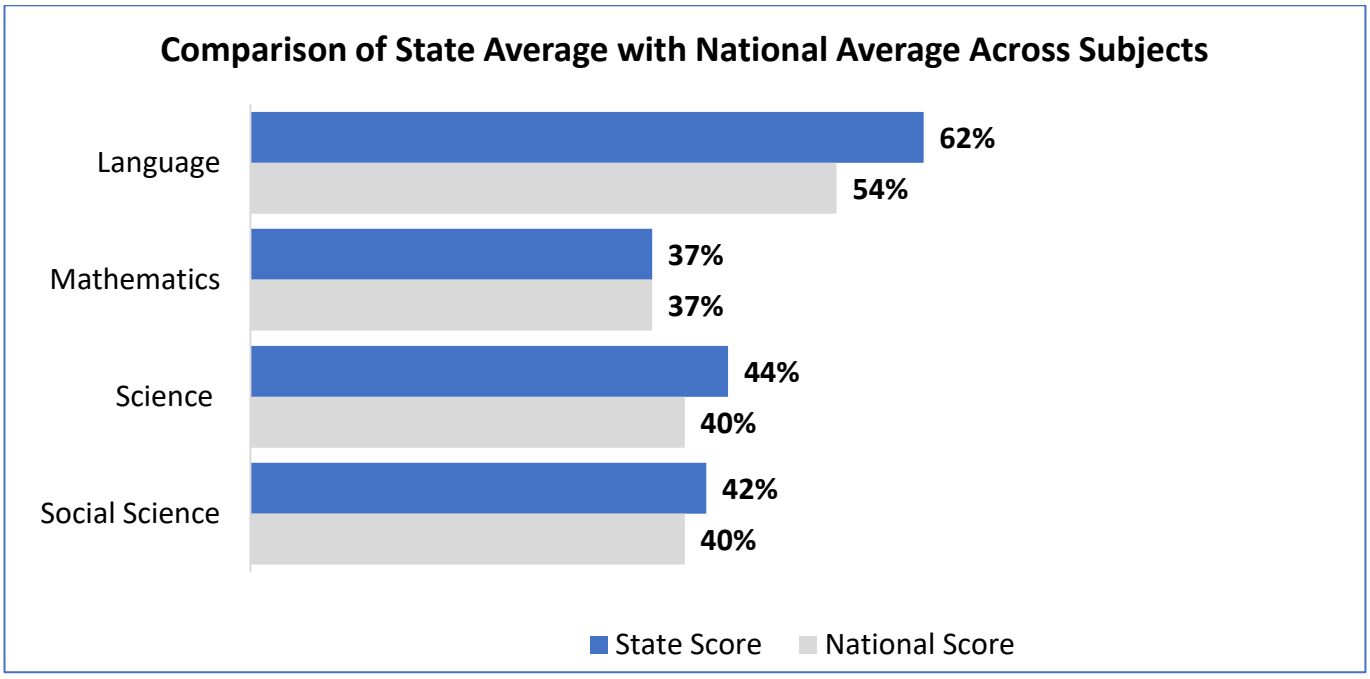
The World Around Us

Competency Code	Competency Description	State	National
C-1.1	Observes and identifies the natural (insects, plants, birds, animals, geographical features, sun and moon, stars, planets, natural resources) and social (houses, relationships) components in their immediate environment	48%	44%
C-1.3	Asks questions and makes predictions about simple patterns (season change, food chain, phases of the moon, movement of stars and planets, shapes of trees, plants, leaves, and flowers, rituals, celebrations) observed in the immediate environment	41%	38%
C-1.4	Explains the functioning of local institutions (family, school, bank/post office, market, and panchayat) in different forms (story, drawing, tabulating data, reports), and analyses their roles	57%	56%
C-2.1	Identifies natural and human-made systems that support their lives (water supply, water cycle, river flow systems, seasons, life cycle of plants and animals, food, household items, transport, communication, electricity in the home)	53%	51%
C-2.2	Describes the relationship between the natural environment and cultural practices in their immediate environment (nature of work, food, festivals, traditions)	39%	38%
C-3.1	Describes the basic safety needs and protection (health and hygiene, food, water, shelter, precautions, awareness of emergency situations, abuse, and unsafe situations) of humans, birds, and animals	57%	57%
C-3.2	Discusses how to prepare for emergency situations (smoke, fire, small injuries, burns, electrical safety, unseasonal rains, fallen trees) based on discussions with family and community, or personal experiences	48%	45%
C-4.1	Observes and describes diversity among plants, and birds and animals in their immediate environment (shape, sounds, food habits, growth, habitat)	56%	54%
C-4.3	Describes usage of natural resources in their immediate environment	52%	50%
C-4.7	Learns about basic social and behavioural norms, values, and dispositions that benefit our social and natural environments and that help our society function smoothly (using dustbins, standing in queues, conserving water, using public transportation, keeping one's environment clean, always helping others in need regardless of background)	53%	51%
C-5.3	Reads simple maps of city, state, and country to identify natural and human-made features (well, lake, post office, school, hospital) with reference to symbols and directions	55%	46%

Performance of Districts (in percentile scale) Grade 6



Assessing Middle Stage Competencies (Grade 9)

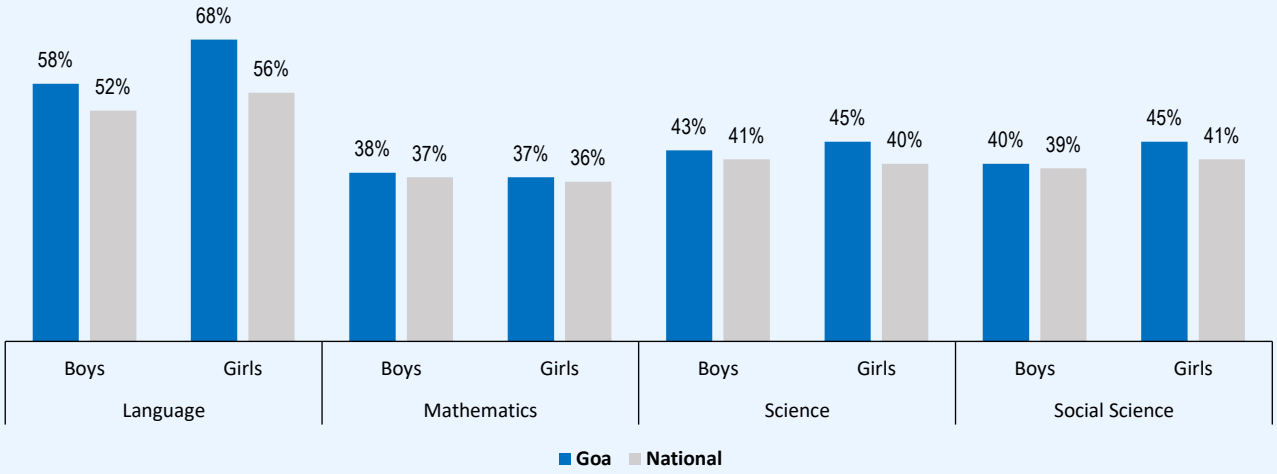


In **Language, Science, and Social Science**, the average performance of students in **Goa** is above the national average, whereas the performance of students in **Mathematics** was at par with the national average.

The performance gap is **8%** in Language, **4%** in Science, and **2%** Social Science.



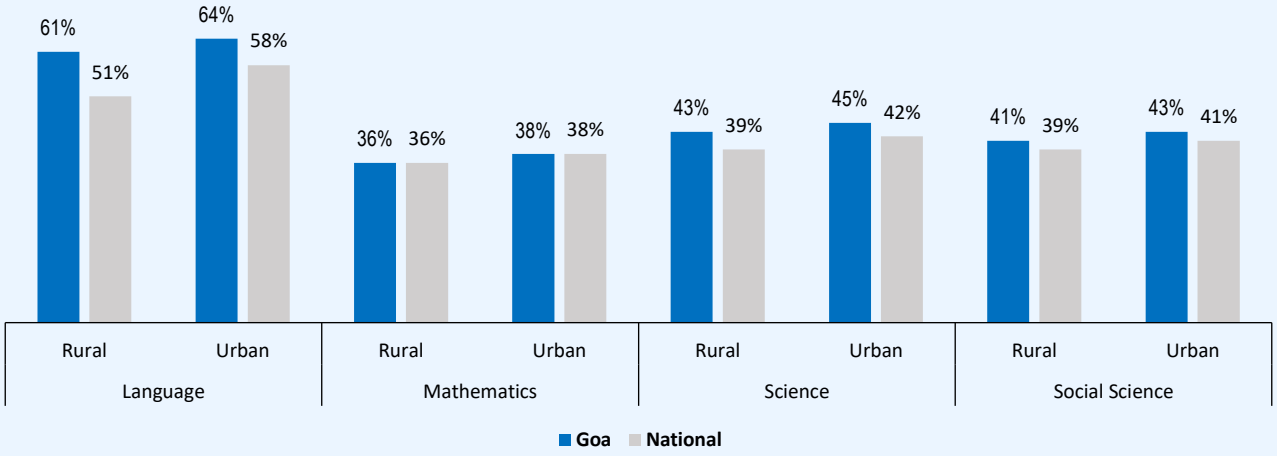
Performance by Gender



Key highlights

- In Language, boys scored 6% higher and girls 12% higher than the national average.
- In Mathematics, both boys and girls scored 1% higher than the national average.
- In Science, boys scored 2% higher and girls 5% higher than the national average.
- In Social Science, boys scored 1% higher and girls 4% higher than the national average.

Performance by Location

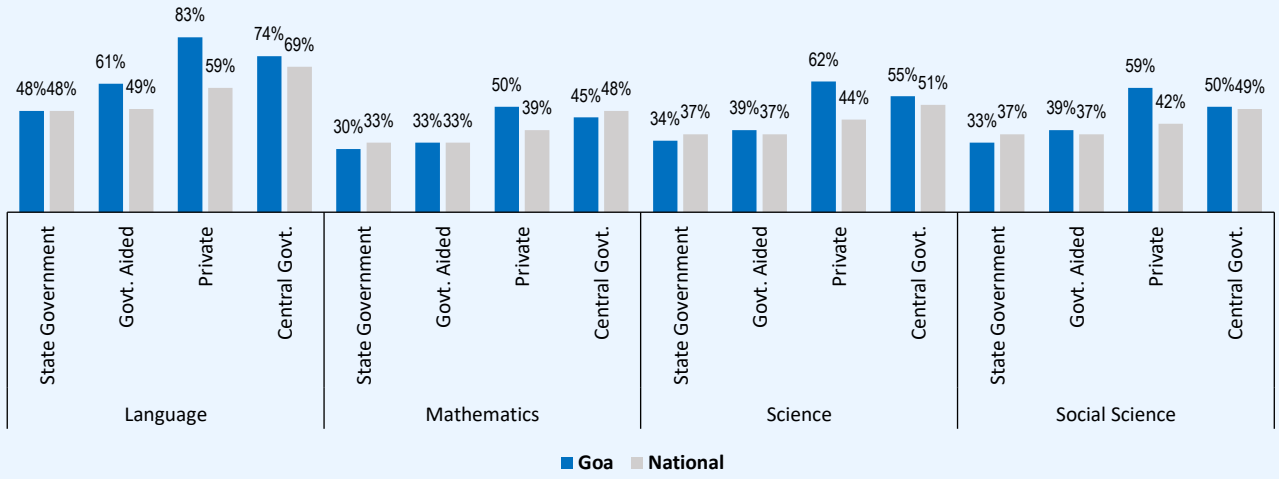


Key highlights

- In rural schools, students scored 10% higher in Language, 4% higher in Science, and 2% higher in Social Science than the national average. The performance was at par with the national average in Mathematics.
- In urban schools, students scored 6% higher in Language, 3% higher in Science, and 2% higher in Social Science than the national average. The performance was at par with the national average in Mathematics.

*The mean difference has not been represented statistically.

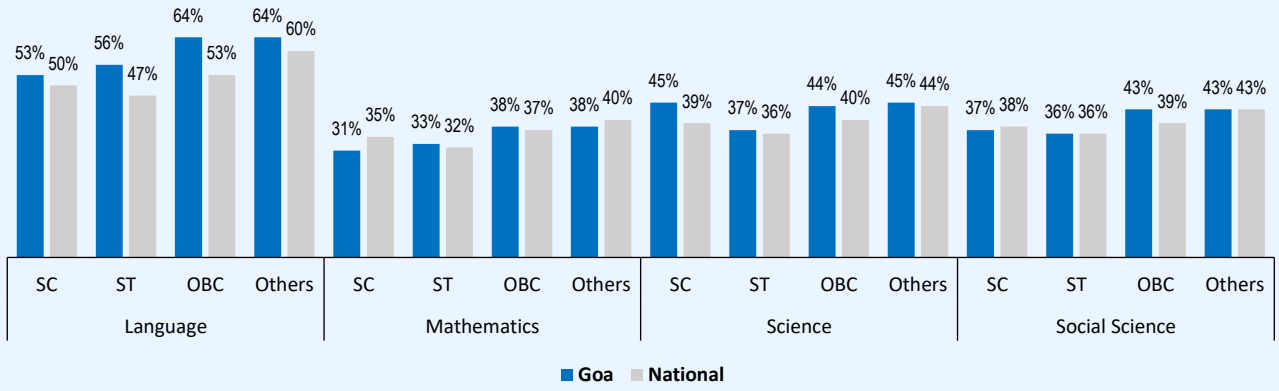
Performance by School Management Type



Key highlights

- In State Government schools, students scored 3% lower in Mathematics and Science, and 4% lower in Social Science. The performance in Language was at par with the national average.
- In Government-aided schools, students scored 12% higher in Language, 2% higher in Science and Social Science. The performance in Mathematics was at par with the national average.
- In Private schools, students scored 24% higher in Language, 11% higher in Mathematics, 18% higher in Science, and 17% higher in Social Science than the national average.
- In Central Government schools, students scored 5% higher in Language, 3% lower in Mathematics, 4% higher in Science, and 1% higher in Social Science than the national average.

Performance by Social Group



Key highlights

- Among SC students, scores were 3% higher in Language, 4% lower in Mathematics, 6% higher in Science, and 1% lower in Social Science compared to the national average.
- Among ST students, scores were 9% higher in Language and 1% higher in Mathematics and Science. The performance in Social Science was at par with the national average.
- Among OBC students, scores were 11% higher in Language, 1% higher in Mathematics, 4% higher in Science and Social Science compared to the national average.
- Among students from other social groups, scores were 4% higher in Language, 2% lower in Mathematics, and 1% higher in Science. The performance in Social Science was at par with the national average.

*The mean difference has not been represented statistically.

Competency-wise Performance (Grade 9)

The tables below show the average percentage of correctly answered questions related to each competency in the state, compared to the national average. For example, in competency C-1.1 (Language, Grade 9) in Goa, the state average of 62% represents the proportion of correctly answered questions, while the national average for same competency was 54%.

Language

Competency Code	Competency Description	State	National
C-1.1	Identifies main points and summarises from careful listening or reading of the text (news articles, reports, editorials)	62%	54%

Mathematics

Competency Code	Competency Description	State	National
C-1.2	Discovers, identifies, and explores patterns in numbers and describes rules for their formation (e.g., multiples of 7, powers of 3, prime numbers), and explains relations between different patterns	40%	39%
C-1.4	Explores and understands sets of numbers, such as whole numbers, fractions, integers, rational numbers, and real numbers, and their properties, and visualises them on the number line	30%	31%
C-1.5	Explores the idea of percentage and applies it to solve problems	24%	28%
C-1.6	Explores and applies fractions (both as ratios and in decimal form) in daily-life situations	30%	31%
C-2.2	Extends the representation of a number in the form of a variable or an algebraic expression using a variable	45%	44%
C-2.3	Forms algebraic expressions using variables, coefficients, and constants and manipulates them through basic operations	41%	38%
C-2.5	Develops own methods to solve puzzles and problems using algebraic thinking	38%	37%
C-3.2	Outlines the properties of lines, angles, triangles, quadrilaterals, and polygons and applies them to solve related problems	40%	37%
C-3.5	Understands congruence and similarity as it applies to geometric shapes and identifies similar and congruent triangles	42%	40%
C-4.1	Discovers, understands, and uses formulae to determine the area of a square, triangle, parallelogram, and trapezium and develops strategies to find the areas of composite 2D shapes	42%	39%
C-5.1	Collects, organises, and interprets the data using measures of central tendencies such as average/mean, mode, and median	43%	41%
C-6.1	Applies both inductive and deductive logic to formulate definitions and conjectures, evaluate and produce convincing arguments or proofs to turn these definitions and conjectures into theorems or correct statements, particularly in the areas of algebra, elementary number theory, and geometry	27%	29%

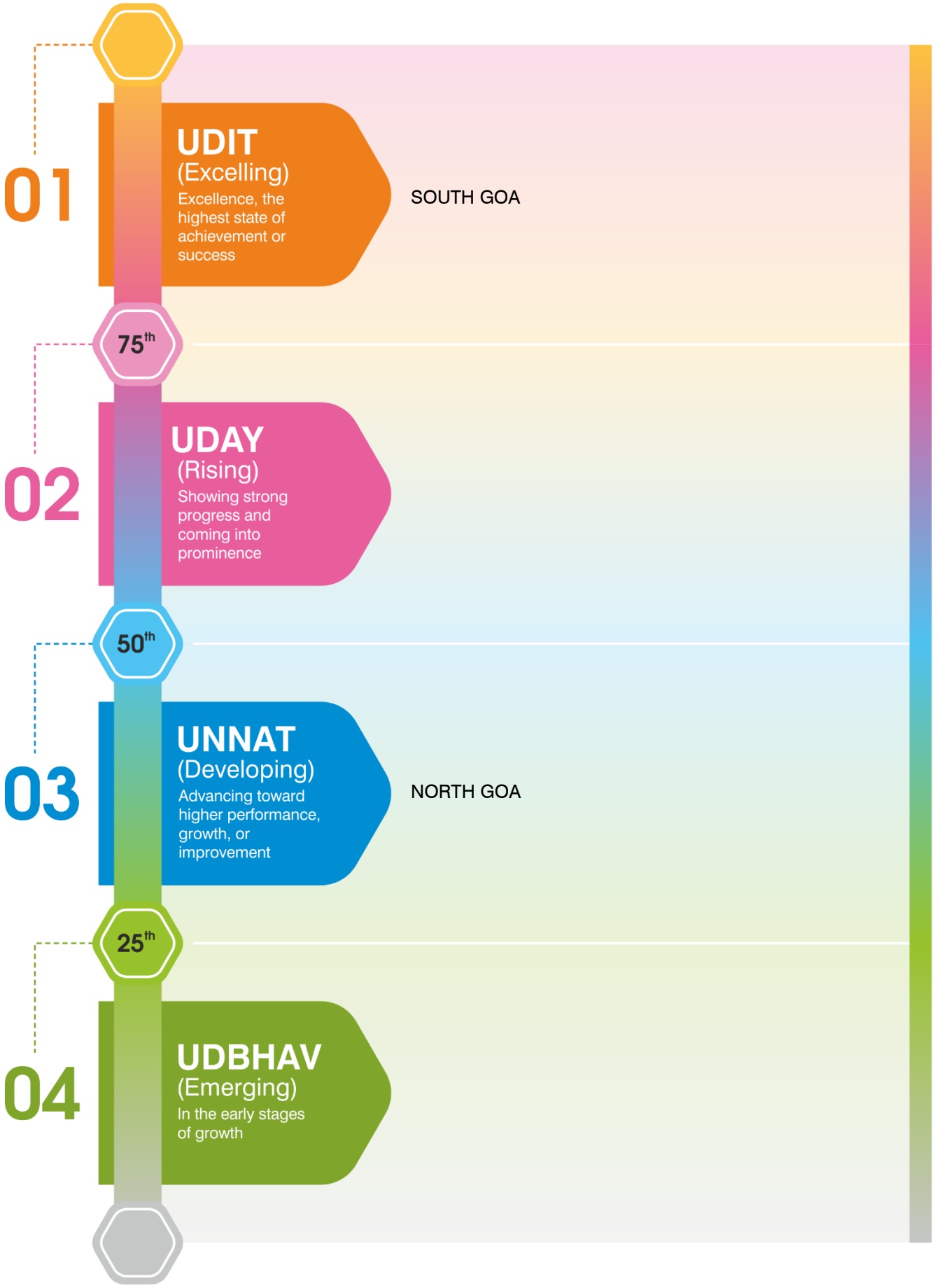
Science

Competency Code	Competency Description	State	National
C-1.1	Classifies matter based on observable physical (solid, liquid, gas, shape, volume, density, transparent, opaque, translucent, magnetic, non-magnetic, conducting, non-conducting) and chemical (pure, impure; acid, base; metal, non-metal; element, compound) characteristics	36%	36%
C-1.2	Describes changes in matter (physical and chemical) and uses particulate nature to represent the properties of matter and the changes	46%	38%
C-1.4	Observes and explains the phenomena caused due to differences in pressure, temperature, and density (e.g., breathing, sinking-floating, water pumps in homes, cooling of things, formation of winds)	39%	37%
C-2.1	Describes one-dimensional motion (uniform, nonuniform, horizontal, vertical) using physical measurements (position, speed, and changes in speed) through mathematical and diagrammatic representations	43%	41%
C-2.2	Describes how electricity works through manipulating different elements in simple circuits and demonstrates the heating and magnetic effects of electricity	36%	33%
C-2.3	Describes the properties of a magnet (natural and artificial; Earth as a magnet)	43%	41%
C-2.4	Demonstrates rectilinear propagation of light from different sources (natural, artificial, reflecting surfaces), verifies the laws of reflection through manipulation of light sources and objects and the use of apparatus and artefacts (such as plane and curved mirrors, pinhole camera, kaleidoscope, periscope)	55%	45%
C-3.1	Describes the diversity of living things observed in the natural surroundings (insects, earthworms, snails, birds, mammals, reptiles, spiders, diverse plants, and fungi), including at a smaller scale (microscopic organisms)	54%	47%
C-3.2	Distinguishes the characteristics of living organisms (need for nutrition, growth and development, need for respiration, response to stimuli, reproduction, excretion, cellular organisation) from non-living things	43%	34%
C-4.1	Undertakes a nutrition-based analysis of food components with special reference to Indian culinary practices and modern understanding of nutrition, and explains the effect of nutrition on health	54%	53%
C-4.3	Describes biological changes (growth, hormonal) during adolescence, and measures to ensure overall well-being	44%	37%
C-7.3	Represents real world events and relationships through diagrams and simple mathematical representations	37%	38%

Social Science

Competency Code	Competency Description	State	National
C-1.1	Collects and interprets multiple sources of information (primary and secondary) to understand the historical, cultural, geographical, and socio-political aspects of human life	35%	32%
C-1.2	Represents and analyses data related to various aspects of human life given in the form of text, tables, charts, diagrams, and maps	62%	53%
C-2.1	Explains and analyses major changes in the past and their impact on society	37%	39%
C-2.2	Recognises elements of the continued prevalence of certain beliefs, relationships, practices, and activities in human society, notwithstanding major changes in society	42%	38%
C-3.1	Analyses the effect of various changes in early human society from nomadism to settled life and early civilisation (such as, the emergence of agriculture, changes in food habits, basic technologies like construction, transport, pottery, metallurgy), and changes in human habitation, family structures and relationships, the nature of work, people's socio-cultural beliefs and concepts over time (e.g., *Ahimsa*, and the fallout of major wars or invasions) that significantly impacted human societies	39%	36%
C-4.2	Assesses the influence of social, cultural, and political institutions on an individual or group or community or society in general	48%	46%
C-6.1	Explains key natural phenomena, such as, climate, weather, ocean cycles, soil formation, the flow of rivers, and how they are spatially distributed	37%	33%
C-6.2	Identifies the distribution of resources, such as, water, agriculture, raw materials, and services across geographies	45%	38%
C-6.3	Analyses Indian perspectives on and efforts towards conservation and sustainability in society, and advocates the importance of the same, and what more needs to be done in these directions including in the context of global climate change	49%	46%
C-6.4	Correlates the existence of different patterns of livelihoods with different types of landforms, availability of resources, and climatic conditions and changes (in local, regional, national, and global contexts)	44%	39%
C-7.1	Explains India's unity in diversity by recognising commonalities in its rich and diverse cultural elements, languages, art, philosophical ideas, values, clothing, cuisines, traditions, festivals, trade, commerce, and health practices including *Ayurveda* and yoga	38%	36%
C-7.2	Discovers the topographical diversity of the Indian landmass from the semi-arid zone in the west and the areas of heavy rains in the north-east to the long coastal areas in the south and the snow-clad mountains in the north, as well as the rich biodiversity of the country	36%	34%
C-8.2	Explains the process of formation of the Indian Constitution and understands the ideas and ideals of the Indian national movement enshrined in it as well as those drawn from India's civilisational heritage	45%	45%
C-8.3	Explains the working of the three tiers of local self-government and appreciates its significance in upholding democracy at the grassroot level	34%	39%
C-9.1	Explains the key elements of trade and commerce (commodity, production, consumption, and capital) and its impact on individual life and society	49%	50%

Performance of Districts (in percentile scale) Grade 9



Recommendations for Targeted Interventions

This subsection presents the gaps identified across three grades and different subjects using the achievement test, pupil questionnaire, teacher questionnaire, and school questionnaire.

1. **Bridging the Gaps in Learning Levels**

   The percentages for competency-wise performance in each grade covered in preceding sections represent the proportion of students in Grades 3, 6, and 9 in Goa who correctly answered questions for each competency in the subjects tested. The percentages offer valuable insights into the students' performance across different competencies, aiding identification of areas that may require targeted support.

   Instances where less than 50% of students in the state were able to answer correctly indicate learning gaps. These learning gaps highlight the need for focused interventions to strengthen students' skills, refine instructional strategies, and provide additional learning support. Addressing these areas effectively will help improve overall student learning outcomes in the state.

2. Use of Innovative Assessment Strategies

The use of innovative assessment strategies like peer assessment, self-assessment, portfolio, and project work are keys to effective learning. The following graph illustrates the percentage of teachers who reported using the aforementioned assessment strategies and reported their use as **regularly** or **sometimes**.

Please note, the survey originally included four response options: Never, Rarely, Sometimes, and Regularly. This analysis focuses on the combined percentage of the following categories, regularly and sometimes, to assess the adoption of these assessment strategies.

A **50% benchmark** is used to identify gaps in adoption. Any assessment strategy where less than **50%** of teachers reported using it at least 'Sometimes' is considered an area needing **targeted interventions.**



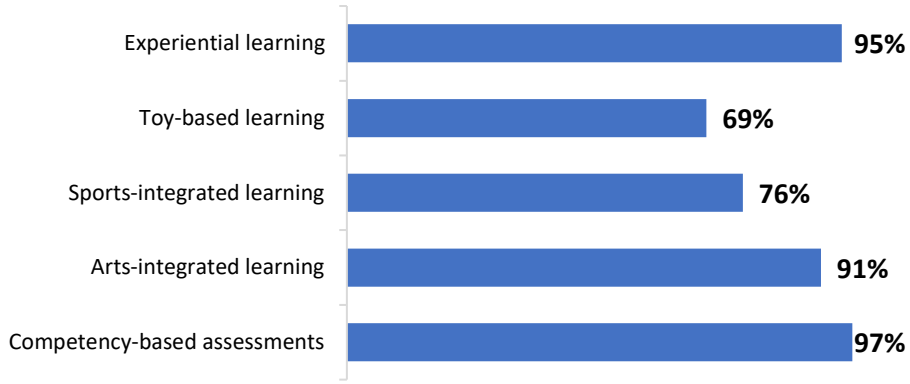
Innovative assessment strategies like self-assessment, peer assessment, and project work were reported to be widely used across schools. However, the use of portfolios appeared relatively less common compared to other methods. Encouraging the consistent use of all innovative strategies, especially portfolios, can further support holistic student assessment and development.

3. Integration of Diverse Pedagogical Approaches in Teaching

The integration of diverse pedagogical approaches contributes to the teaching-learning process. The following graph illustrates the percentage of teachers who reported incorporating the following pedagogical approaches: sports integration, arts integration, toy-based, and experiential learning, and reported their use as **regularly** or **sometimes**.

Please note, the survey originally included four response options: Never, Rarely, Sometimes, and Regularly. This analysis focuses on the combined percentage of the following categories, regularly and sometimes, to assess the adoption of these assessment strategies.

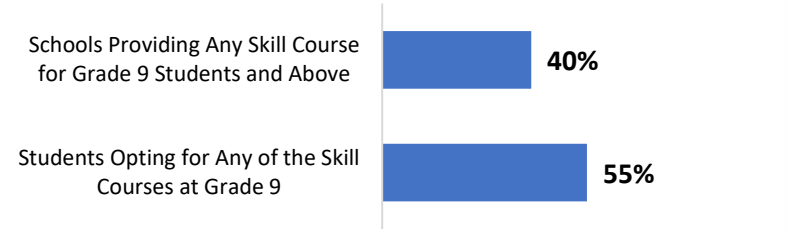
A **50% benchmark** is used to identify gaps in adoption. Any pedagogical approach where less than **50%** of teachers reported using it at least 'Sometimes' is considered an area needing **targeted interventions.**



Experiential learning, arts-integrated learning, sports-integrated learning, and competency-based assessments were commonly used by schools. However, toy-based learning was relatively less emphasized compared to the other approaches. Strengthening the use of toy-based methods can help further diversify classroom practices and engage students more effectively.

4. Skill Education in Schools

In the 21st century, skill education equips learners to develop specific job-ready skills and competencies and adapt to the changing workforce requirements. The following table shows the percentage of schools that provide skill courses for students of Grade 9 and above, and students who have opted for skill courses at Grade 9. The responses for both items were reported as **yes** or **no**.



A **50% benchmark** is used to identify gaps. Either criterion where less than **50%** of schools reported as 'Yes' is considered an area needing **targeted interventions.**

The findings highlight the need for greater integration of skill education in schools. Policymakers can use this data to **introduce diverse skill courses**, provide **funding and infrastructure support**, and **raise awareness among students** about career opportunities. Strengthening industry partnerships and aligning courses with job market needs can enhance **skill development and employability**.

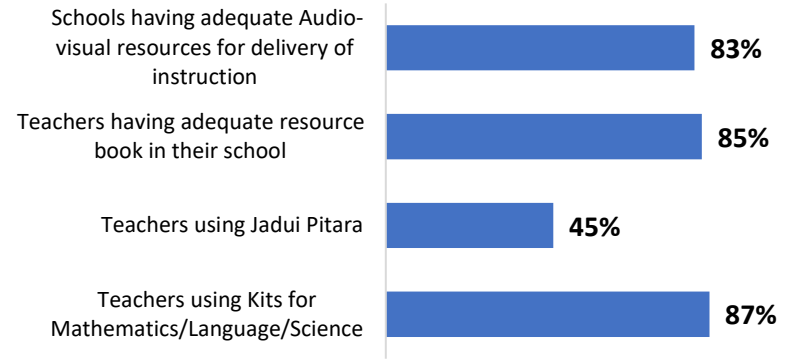
Skill-based education is yet to gain widespread presence in schools, as less than half currently offer skill courses at the secondary level (Grade 9 and above). Of the schools that do provide these courses, only a little over half of the students are participating in them. It is essential for schools to explore opportunities to broaden access to skill-based education. Furthermore, students should be motivated to participate in these programs to build relevant, hands-on skills that prepare them for real-world careers and lifelong learning.

5. Learning-Teaching Material at School

Access to diverse learning and teaching materials plays a crucial role in enhancing the quality of education. A variety of resources, such as audio-visual aids, teacher resource books, subject-specific kits, and interactive learning tools like Jadui Pitara, contribute to making classroom instruction more engaging and effective. These materials help facilitate better understanding, encourage active participation, and enhance the overall quality of education. Ensuring access to diverse and adequate learning resources is essential for fostering an interactive and well-rounded learning environment.

The following graph presents the percentage of schools that have access to essential teaching-learning resources, including textbooks, digital content, and other instructional materials.

A **50% benchmark** is used to identify gaps. Any category where less than 50% of schools reported availability of materials is considered an area requiring intervention.

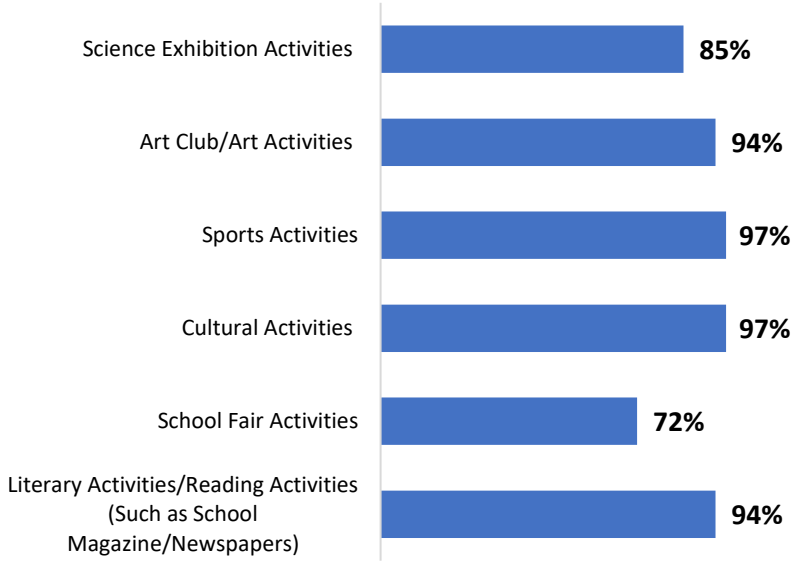


A large number of teachers reported using kits for Mathematics, Language, and Science in their classrooms. Availability of resource books and audio-visual resources for instruction was also reported by many schools. However, the use of Jadui Pitara was found to be relatively limited. Strengthening the use of diverse learning materials can further enrich the teaching-learning process.

6. Experiential Learning Opportunities in School

Experiential Learning is a core aspect of teaching-learning practices and contributes to active learning. The following graph illustrates the percentage of teachers who reported availability of the following experiential learning opportunities in school: art activities, cultural activities, literary/reading activities, school fairs, science exhibitions, and sports activities, and reported their availability as yes or no.

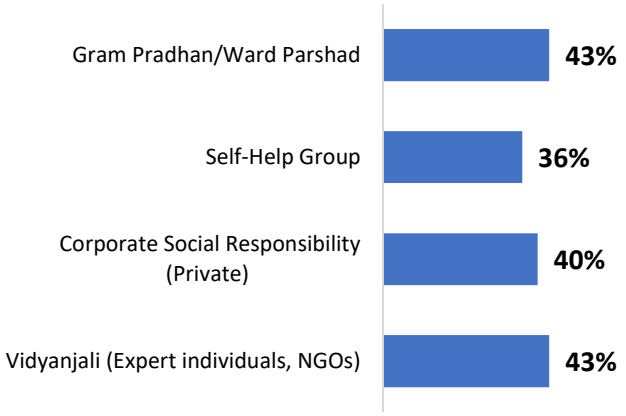
A **50% benchmark** is used to identify gaps in availability. Any experiential learning opportunity where less than **50%** of schools reported its availability as 'Yes' is considered an area needing **targeted interventions.**



Schools provide a wide range of experiential learning opportunities, with a notable focus on sports and cultural activities. art-based initiatives and literary events are also regularly organized. However, opportunities like science exhibitions and school fairs are comparatively less frequent. To promote a well-rounded and stimulating educational experience, it is important for schools to support teachers in offering balanced access to all types of experiential learning.

7. Community Participation

Active participation by the community plays a crucial role in enhancing the quality of education and overall school development. Support from local governance bodies, NGOs, self-help groups, and Corporate Social Responsibility (CSR) initiatives can contribute significantly to a school's resources and learning environment. The chart below illustrates the current levels of community support in schools, highlighting areas where increased engagement can make a meaningful impact.



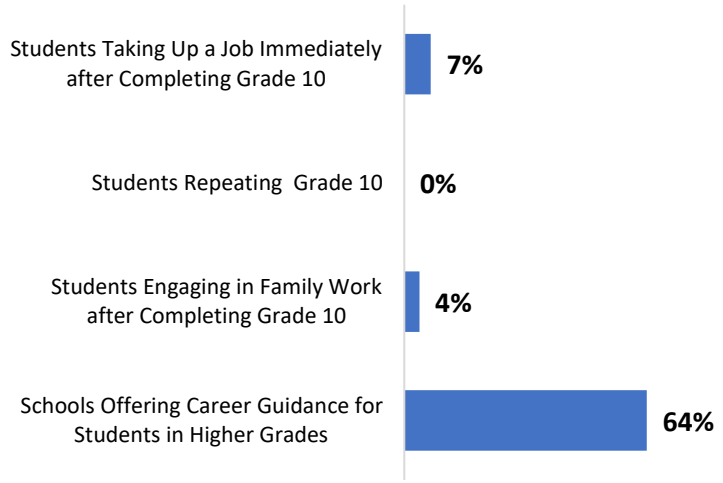
A **50% benchmark** is used to identify gaps in participation of the community.

Participation from Gram Pradhan/Ward Parshad and through Vidyanjali initiatives was reported in some schools, while involvement through CSR initiatives and self-help groups was relatively lower. Strengthening community partnerships and encouraging greater involvement of local stakeholders could enhance support systems around students' learning and development.

8. Students Outside the Educational System

Students exit the education system after Grade 10 because of different reasons like taking up a job, repeating the grade, and participating in family work. Schools reported the exit of students through percentages (0-25%, 26-50%, 51-75%, 76-100%). E.g., 26-50% of students took up a job.

A **50% benchmark** is used to identify gaps in the system. Aspects that schools reported as 51-75% or 76-100% are considered as areas needing **targeted interventions** to reduce the percentage of students exiting the education system.

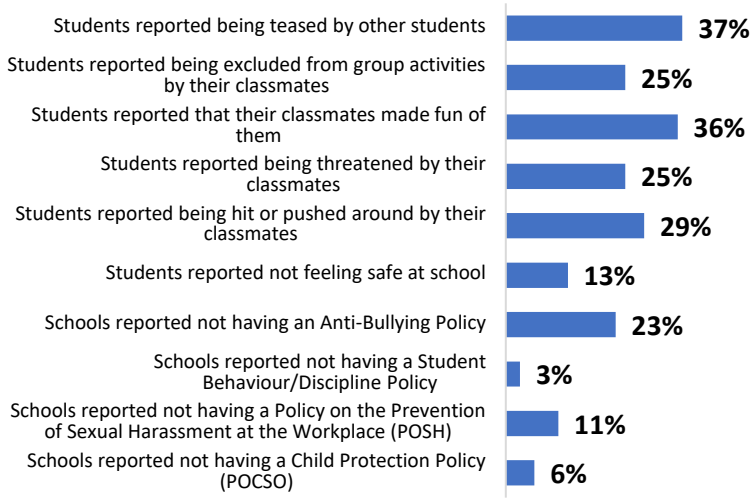


Few students appear to leave formal education after completing Grade 10, often due to family responsibilities or the need to join the workforce. Although many schools provide career guidance in higher grades, these services remain limited. To address this, schools should prioritize career counseling workshops and ensure that such services are accessible to all students.

9. Safe and Friendly School Environment

A positive school environment is essential for students' well-being and academic success. The survey findings indicate areas where improvements are needed to promote safety, inclusivity, and emotional security in schools. Strengthening anti-bullying measures, fostering peer inclusivity, and implementing key protection policies can significantly enhance the overall learning experience. The graph below highlights critical areas requiring attention to create a safer and more student-friendly school environment.

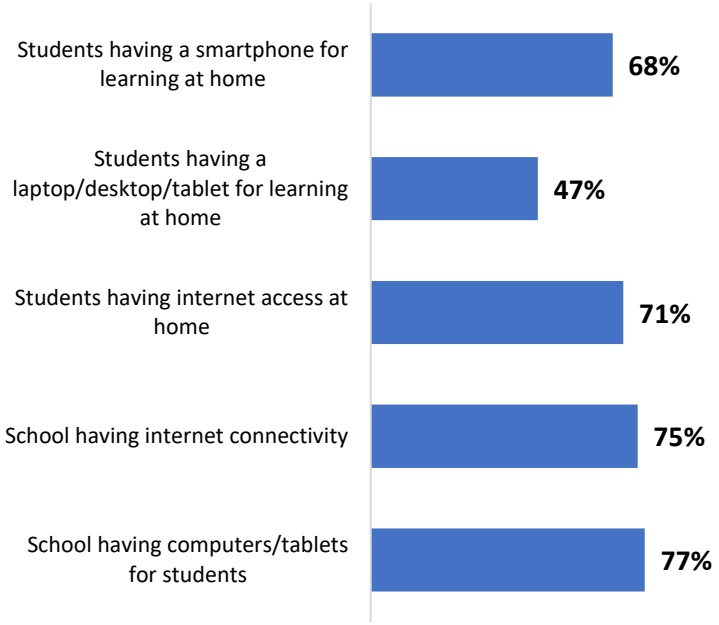
School leaders and/or policymakers must provide special attention to the situations/cases where the proportion reported in the graph is **higher than 50%**.



A safe and respectful school environment is essential for students' emotional well-being and academic success. However, some students continue to face issues such as being teased, ridiculed, physically pushed, excluded from group activities, or threatened by their peers, with a few also reporting feelings of insecurity within the school premises. These incidents are deeply concerning, as they can lead to emotional distress and hinder students' overall development. Despite the seriousness of these challenges, some schools still lack clear policies to address bullying, discipline, sexual harassment, and matters related to POCSO. To respond effectively, schools must implement child-friendly grievance redressal mechanisms and ensure that teachers and staff are properly trained to handle such issues with care and sensitivity. Promoting a culture of empathy and respect through regular classroom discussions, peer-led initiatives, and school-wide awareness programs can further contribute to creating a safe, inclusive, and supportive environment for all learners.

10. Use/Availability of Technology for Better Learning

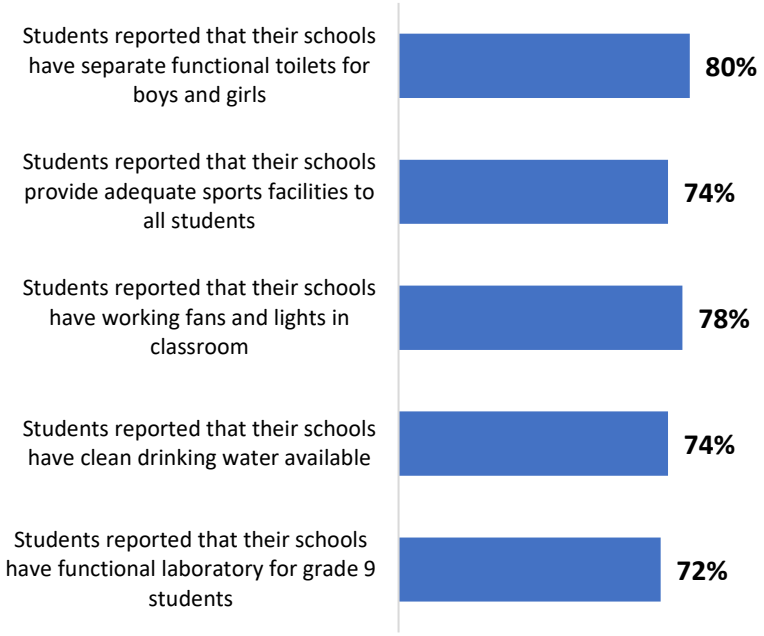
In the last few decades, access to technology has become imperative for effective learning. The graph below illustrates the access to technology and digital devices at school and home. Instances where access is below **50%** need targeted interventions.



A good number of schools have access to internet connectivity and provide digital tools such as computers or tablets for students. While many learners can access the internet and smartphones at home, less than half report having personal devices like laptops, desktops, or tablets. Strengthening access to individual digital devices could help bridge the digital divide and enhance learning opportunities for students.

11. Essential School Facilities

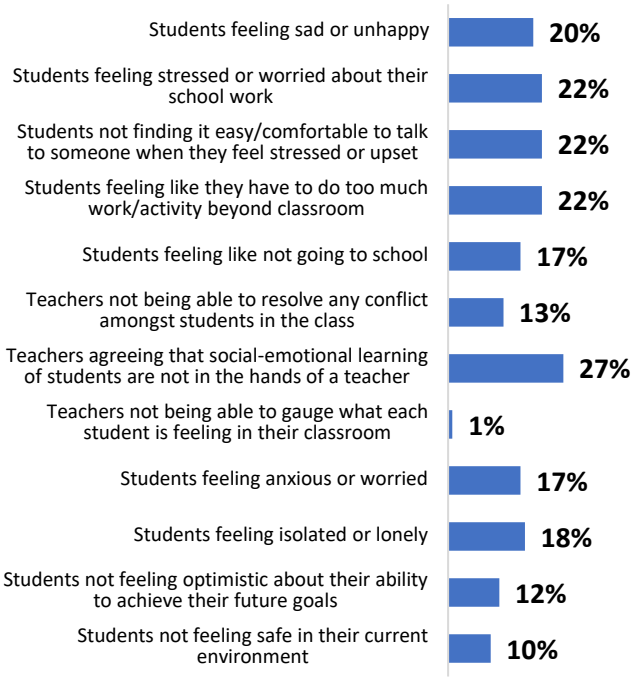
School facilities play an important role in the teaching-learning process. The graph below illustrates the availability of essential school facilities like sports facilities, drinking water, functional fans and lights, science lab, and separate functional toilets. Instances where availability is below **50%** need targeted interventions.



A majority of students acknowledged the presence of essential school facilities in their schools, such as separate functional toilets for boys and girls, along with properly working fans and lighting in classrooms. Facilities like clean drinking water, adequate sports infrastructure, and functional science laboratories for Grade 9 are comparatively less available across schools. To enhance the overall quality of the school environment, it is important that schools focus on upgrading and maintaining these critical resources to support students' health, physical development, and hands-on learning opportunities.

12. Need to Focus on Social Emotional-Learning

Social-Emotional Learning (SEL) plays a crucial role in students' well-being and academic success. The survey responses highlight areas where **greater attention is needed** to support students' emotional health and equip teachers with strategies to foster a positive learning environment. Schools where less than **50% of students and teachers** report positive SEL experiences should focus on **strengthening mental health support, conflict resolution training, and emotional awareness initiatives**.

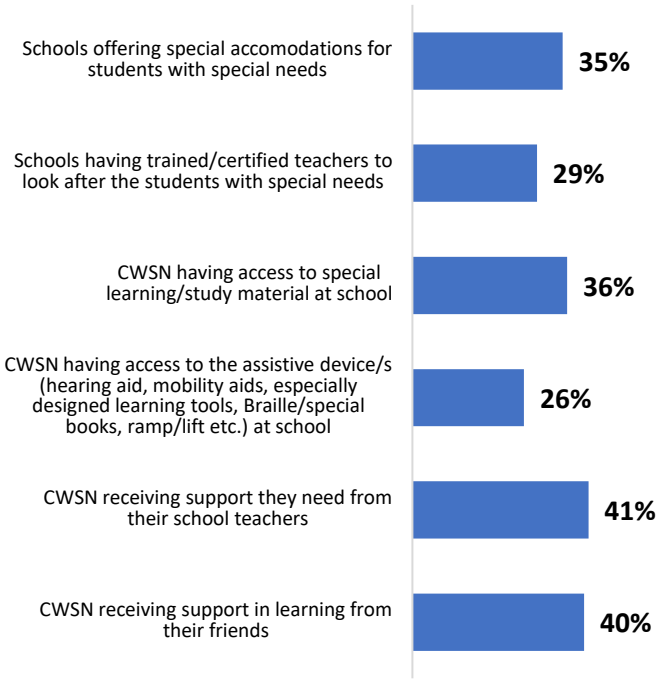


Emotional and psychological challenges affect many students, including stress from academic work, feelings of sadness or unhappiness, reluctance to attend school, and external pressures. Additionally, some students find it difficult to communicate when they are upset, and many report experiencing isolation, anxiety, or uncertainty about their future goals. Certain teachers find it difficult to address the social-emotional needs of students or resolve conflicts within the classroom. Additionally, some teachers are unable to gauge the emotional state of their students effectively. To address these issues, schools should provide comprehensive mental health programs and professional development for teachers, equipping them with the tools to identify and support students' emotional well-being and manage classroom dynamics effectively.

13. Inclusiveness at the School Level

Inclusive education is essential for fostering a supportive learning environment where Children with Special Needs (CWSN) receive the necessary accommodations, resources, and support. The table below highlights survey responses regarding inclusivity at the school level.

For areas where less than **50%** of schools currently implement inclusive measures, additional efforts are needed to ensure that all students, including those with special needs, have equal access to learning opportunities. Strengthening teacher training, providing assistive resources, and fostering peer support can significantly enhance inclusivity in schools.



Support for children with special needs (CWSN) from friends or teachers is provided to fewer than half of the students. While some schools offer specialized learning materials and accommodations for CWSN, others have trained or certified teachers to assist these students. Additionally, certain schools are equipped with assistive devices to support the learning of children with special needs. To improve support, schools should expand access to specialized resources, ensure that all teachers are trained in inclusive teaching practices, and invest in assistive technology to create a more inclusive learning environment.

14. Continuous Professional Development

Professional development is crucial for empowering teachers and school leaders with modern teaching strategies, leadership skills, and student support techniques. The table below highlights the details of teachers and school leaders participating in the various professional development programmes. A **50% benchmark** is used to identify the gaps. The table highlights the key areas where improvements can be made to ensure effective training and skill-building opportunities for educators.

Description	%
Teachers Participating in Professional Development Programmes in the Last 12 months	**43%**
Teachers Participating in the 'Mentoring and/or Peer Observation and Coaching as part of a formal school management in BRCs/CRCs' activity in the last 12 months	**28%**
Teachers Participating in the ICT related training during the last 12 months	**33%**
School principals/head teachers undergone training on NEP 2020/ NCF-FS 2022/NCF-SE 2023/HPC	**68%**
School principals/head teachers undergone school leadership training programme organized by NIEPA or state government	**61%**
Schools organized teacher training session/workshop on Stress Management in the past two academic years	**72%**
Schools organized teacher training session/workshop on managing emotions/emotional intelligence in the past two academic years	**67%**
Schools organized teacher training session/workshop on Mental Health awareness in the past two academic years	**80%**
Schools organized any teacher training session/workshop on Behavioural Management in a classroom in the past two academic years	**77%**
Schools organized teacher training session/workshop on Managing and understanding Adolescent behaviour in the past two academic years	**74%**
Schools organized teacher training session/workshop for parents around 'understanding their children better/managing their behaviour'	**91%**
Schools offering any regular Professional Development sessions for teaching staff in the past two academic years	**72%**

Efforts are being made by schools to organize workshops and sessions for parents and teachers on key topics such as managing adolescent behavior, behavioral management, mental health, stress management, and emotional regulation. More than half of the principals have participated in training related to NEP 2020 as well as school leadership training. Additionally, teacher participation in professional development programs remains limited. Schools should develop a more structured approach to professional development by offering regular training programs, fostering peer collaboration, and encouraging participation in leadership and subject-specific development initiatives.