

Quality of School Education in India: A State-Level Analysis

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ABSTRACT: This study conducts an empirical assessment of inter-state disparities in the quality of India's cross-regional school education. Covering all 36 states and union territories across the country, the study adopts the Performance Grading Index 2.0 for the 2022-2023 academic year, which categorizes 73 indicators into six major domains. The study employs descriptive statistics, comparative ranking, and Pearson correlation analysis to evaluate interstate disparities and domain-wise performance. The findings reveal that Equity, Access, and Teacher Education perform relatively well, whereas Learning Outcomes, Infrastructure, and Governance remain weaker dimensions. Chandigarh, Delhi, and Odisha emerge as the best-performing regions. Significant positive correlations among education domains highlight their interdependence. The study proposes that integrated policy interventions should be implemented to achieve balanced and sustainable improvement in education quality.

KEYWORD- School Education, Learning Outcomes, Access Opportunities, Compulsory Education Act

I. INTRODUCTION

A sound school education system is a core pillar that supports long-term social development, and can inject sustained momentum into national development through multiple dimensions, including the accumulation of human capital and the improvement of public well-being. According to official statistics released by the Government of India [5], India currently has more than 1.47 million schools, approximately 9.8 million teachers, and a student enrollment of nearly 248 million. This large scale of basic education forms the core realistic foundation for India's education development. It is undeniable that India has made progress on core indicators such as school enrollment rates by relying on a series of policy frameworks and implementation projects, including the Right of Children to Free and Compulsory Education Act, United Nations Sustainable Development Goal 4, the country's National Education Policy 2020, the Samagra Shiksha Abhiyan, and the Scheme for Restructuring of Higher Secondary Education. This progress has been confirmed by multiple existing studies, including an assessment report released by the Government of India[6].

However, India's current basic education still faces regional imbalance problems across multiple dimensions, including learning outcomes, infrastructure, governance equity, and

teacher quality. Simply raising enrollment rates is far from sufficient to guarantee overall education quality. Building a multi-dimensional education performance assessment framework has become a core research demand to resolve the current development dilemma. In response, the Government of India launched and upgraded the Performance Grading Index 2.0 in 2025. This unified assessment tool covers all states and union territories across the country, and enables horizontal comparison of education levels across states through a unified scoring standard. This study relies on the report PGI 2.0, 2022-23 and 2023-24[5] data to conduct analysis centered on three core areas: sub-domain performance, inter-state gaps, and internal correlations among assessment dimensions. The empirical evidence generated by this study will provide support for targeted policy interventions, and help promote balanced improvement in the overall education quality of India.

II. LITERATURE REVIEW

India's school education sector has been the subject of extensive academic discussion across multiple dimensions, including access, quality, equity, governance, and policy reform. Researchers in the field have reached a general consensus: India's education sector has not only made notable progress that cannot be overlooked, but has also continuously faced a set of long-unresolved core challenges. When sorting through existing research outputs in chronological order of publication, the following key findings emerge: Kingdon[11] synthesized prior studies in his work, compared India's educational outcomes with international standards, and argued that while enrollment rates had risen, clear risks remained in learning outcomes, school infrastructure, teacher quality, and the gap between public and private schools. Kaushik et al. [22] integrated past survey data, focused on the primary education stage, used principal component analysis to construct an educational outcome index, and found significant gaps in enrollment rates, retention rates, and learning outcomes both across India's states and within individual states, pointing to severe imbalance in regional educational development. Kumar and Rustagi[10] analyzed the progress of universalizing primary education in India using existing datasets. They argued that despite the continuous expansion of enrollment, six types of inequality—related to region, gender, social exclusion, infrastructure, governance, and teacher competency—still hinder the advancement of educational equity. Bapna and Sharma[2] synthesized previous systematic studies to map

out the overall landscape of India's education system. They concluded that it is necessary to implement evidence-based planning and build a reliable educational data system, in order to respond to changing social needs and effectively improve education quality. Mohanty and Dash [14] integrated relevant global frameworks, adopted a sustainable development perspective, and put forward a conceptual framework to integrate education for sustainable development into India's school system, aligning with United Nations Sustainable Development Goal 4 to cultivate learners' lifelong learning capacities and sustainable literacy. Tukdeo[21] sorted through existing discussions in history and policy studies, approached the issue from historical and policy dimensions, and demonstrated that India's education reforms are the product of complex interactions among social, political, and economic forces, while the influence of global policy discourse and public-private partnership models is steadily growing. Choudhury et al. [5] integrated survey data from recent years and found that significant regional, gender, and socioeconomic gaps exist in access to pre-primary education. The study also identified household economic status and parents' educational attainment as the core factors that affect the early education participation of marginalized groups. A synthesis of the core conclusions from all existing research shows that despite the outstanding success of India's school education in expanding its scale, improving learning quality, narrowing regional and social gaps, refining the governance system, and guaranteeing inclusive and equitable access remain core challenges that must be overcome to achieve sustainable educational development.

India's secondary education is a core strategic node in the country's education system, linking primary education, higher education and skills development, and underpinning human capital formation and economic growth. Current studies generally agree that although India's education sector has achieved large-scale expansion in the number of schools and enrollment rates, the development process across its states has been uneven. Rani [18] notes that inter-state disparities are very pronounced: Kerala, Haryana, and Maharashtra consistently outperform Bihar, Uttar Pradesh, and Rajasthan.

Chaudhari [4] identifies four core barriers including insufficient infrastructure that hinder the universalization of quality secondary education. Bandyopadhyay[1] adds that even though the national initiative RMSA has boosted enrollment rates, gaps between states in access, equity and quality remain a long-term core challenge, and the overall expansion suffers from uneven development across the entire country.

The academic community widely agrees that improving the quality of secondary education in India must focus on institutional effectiveness, rather than merely expanding physical infrastructure. Jain and Prasad [9] put forward a comprehensive quality assurance framework that covers monitoring, evaluation, and continuous institutional improvement. Chandra [3] argues that while India has expanded its number of schools, teaching workforce, and enrollment rates, issues including promotion rates, retention rates, learning outcomes, and public financing continue to hold back educational quality. Nayak, Roy, and Jana [16] used the stochastic frontier approach to assess educational efficiency across Indian states, and found that the student-teacher ratio, spending under the Sarva Shiksha Abhiyan

(SSA, or Education for All movement), and the availability rate of girls' toilets on school campuses are the core influencing factors, with significant efficiency gaps between states.

Among existing studies on the determinants of educational quality, a large body of literature carries out analysis from three core perspectives: technological innovation, teaching effectiveness, and access to educational facilities. Representative research findings include the following: Patra and Mete[17] propose that the integration of information and communications technology (ICT) can improve classroom instruction, learning experiences and educational outcomes; Singh and Sarkar[20] find that factors such as qualified teachers generate far greater gains in academic performance than isolated traditional teacher characteristics. Studies by Mukhopadhyay and Sahoo [15] and Siddhu[19] respectively confirm the positive effect of access to secondary education, and the barrier that school commute distance poses for disadvantaged rural households. All four studies align precisely with the three core dimensions outlined.

The education sector has reached a core consensus that multi-dimensional indicators must be adopted to assess education quality and measure the education performance of India's states, which forms the core foundation for comprehensive state-level analysis of education quality. Leading field scholar Kumar[12] defines education quality as a systemic attribute encompassing curriculum, teaching staff, learners, and institutional reform, rejecting the one-dimensional approach that defines quality solely based on physical infrastructure. Lewin [13] pointed out that India's secondary education expansion faces four types of constraints: shortages of infrastructure, teachers, and financial resources, as well as unequal access. Iyer and Moore [8] argued that education quality should be measured using cognitive achievement combined with 21st-century skills. Jana [10], [23] proposed a set of locally adapted, multidimensional assessment indicators and conducted cross-state performance comparisons using principal component analysis. The above studies collectively indicate that while India's secondary education expansion has achieved substantial progress, inter-state gaps in education quality continue to exist, which underscores the necessity of carrying out multi-dimensional comprehensive state-level analysis.

III. OBJECTIVES OF THE STUDY

This study focuses on school education across all states and union territories of India, and sets four progressive core objectives: to measure the schooling performance of each region across different subfields, to compare and rank all regions based on six evaluation dimensions, to analyze the internal links among core domains, and to identify inter-state gaps and clarify policy priorities for education quality improvement.

IV. METHODOLOGY AND DATA SOURCE

The core assessment tool adopted in this study is PGI 2.0[5], India's official school education evaluation indicator system. This system includes a total of 73 indicators, divided into 2 broad categories across 6 domains, with a total weighted score of 1000 points on the system of school

education from pre-primary to secondary level. The two broad categories are Outcomes, and Governance and Management; the 6 domains in order are Learning Outcomes, Access Opportunities, Infrastructure, Equity, Governance Processes, and Teacher Education and Training. PGI 2.0 can connect with five official Indian education databases: UDISE+, NAS, PM POSHAN portal,

PRABANDH portal, and Vidyanjali portal. This study uses descriptive statistics and comparative analysis to process domain scores, percentile scores, and state-level rankings, and applies the Pearson correlation coefficient to test the correlation strength between each domain. This framework can evaluate inter-state school education gaps in India and identify policy priorities for improving education quality.

Table 1: Categories, Domains, and Indicators used in PGI 2.0

Categories	Domain	Indicators	Total Weight
1. Outcomes	Learning Outcomes and Quality (LO)	12	240
	Access (A)	7	80
	Infrastructure & Facilities (IF)	15	190
	Equity (E)	16	260
2. Governance Management (GM)	Governance Processes (GP)	15	130
	Teacher Education & Training (TE&T)	8	100
Total		73	1000

Source: Government of India [5]

All quantitative analysis data and core basic statistical information for India's national School Education Performance Grading Index (PGI) 2.0 for the 2022-23 and 2023-24 academic year, released in this study, are fully compiled in Table 2 of the main text. This index covers all 36 states and union territories across India. Centring on core development links of school education, it establishes six assessment dimensions: Learning Outcomes (LO), Access (A), Infrastructure (IF), Equity (E), Governance Processes (GP), and Teacher Education and Training (TE&T). All data included in the analysis are sourced from the first-hand survey results of this national

national average score for learning outcomes is only 25.2%, making this the most prominent shortfall; scores for infrastructure and governance also fall short of desired levels.

After organizing the two groups of data, this study finds that India as a whole has achieved notable progress in education equity, school enrollment access, and teacher training, but faces prominent shortcomings in learning outcomes and governance processes. Inter-state development gaps are extremely wide, and progress in access and equity has not translated into improvements in learning quality. This is the core policy challenge facing India's current school education system.

This study draws on official school education ranking data from India's 2022-23 academic year, and uses the PGI 2.0 framework to analyze the sub-domain performance rankings of the country's states and union territories based on percentage scores as presented in Table 3. The calculation logic for the overall ranking presented in Table 4 is as follows: the ranking is generated by averaging the sub-domain rankings of the six core school education domains covered by PGI 2.0. Chandigarh ranks first overall, with the lowest average ranking of 5.67; apart from a mediocre performance in the equity domain, it delivers strong results in the remaining five core domains. Following closely behind, Delhi ranks second, Odisha third, Punjab fourth, and Gujarat and Maharashtra tie for 5th. This study finds that all regions with high overall rankings maintain balanced performance across multiple dimensions of education. In the overall list, Meghalaya ranks 36th, which is the last place, while Arunachal Pradesh ranks 35th; both have widespread shortcomings in the vast majority of fields. The top performers in each subfield are as follows: Punjab leads in the learning outcomes domain, Puducherry leads in the access domain, Chandigarh leads in the infrastructure domain, Delhi leads in the equity domain, Gujarat leads in the governance domain, and Kerala leads in the teacher education and training domain. Five large-population states, including Tamil Nadu, rank in the middle of the overall list due to uneven performance across fields. Based on these findings, this study argues that to achieve high-quality

V. FINDINGS OF THE STUDY

This study draws on statistical data from the Performance Grading Index (PGI) for school education under India's 2022-23 and 2023-24 academic year framework, and uses two sets of standardized scoring tables, Table 2 and Table 3, to examine gaps in school education development across India's states and union territories. First, based on the domain-specific absolute scores in Table 2, significant inter-state performance disparities are found to exist across all six education domains. The Equity domain, which carries the highest weight of 260 points, registers the highest absolute score for nearly all states. Administrative regions including Delhi (239.1) and Maharashtra (234.3) lead in Equity scores; Chandigarh performs strongly across multiple domains such as learning outcomes and infrastructure; Punjab achieves the country's highest learning score; four states including Meghalaya and Arunachal Pradesh lag in most domains. Only a small number of states exceed the national average scores for learning outcomes, infrastructure, governance, and teacher education, confirming notable nationwide education gaps.

Next, this study presents the percentage scores generated by adjusting the full marks of each domain in Table 3, which resolves the problem of incomparability of cross-domain scores. The analysis identifies access and equity as the strongest dimensions of India's school education, while teacher education performs at an acceptable level. The

education, all dimensions of school education must be advanced simultaneously; it is not sufficient to perform strongly in only one or two fields.

Table 2: Domain-wise Values of Performance Scores in School Education across States/ UTs of India, 2022-23 &2023-24

	Total Weight	240	80	190	260	130	100
S. No.	State	Learning (LO)	Access (A)	Infrastructure (IF)	Equity (E)	Governance (GP)	Teacheredu (TE &T)
1	Andaman & Nicobar Islands	60.8	66.9	101.1	212.2	46.9	75.1
2	Andhra Pradesh	47.8	69.2	99.3	226.5	50	69.4
3	Arunachal Pradesh	45.0	43.2	63.9	214.6	30.9	63.8
4	Assam	62.6	46.0	81.0	224.9	44.9	52.1
5	Bihar	64.4	52.9	55.0	209.3	22.8	67.5
6	Chandigarh	103.6	72.4	148	216.5	76.7	85.7
7	Chhattisgarh	38.8	56.4	76.3	215.9	39.8	67.5
8	DNH&DD	42.7	58.6	120.9	230.6	56.9	82.6
9	Delhi	63.8	64.4	117.9	239.1	48.9	89.6
10	Goa	61.4	65.5	96.7	224.4	59.9	81.8
11	Gujarat	60.2	59.6	93.4	230.1	87.8	83.3
12	Haryana	78.4	62.7	92.0	225.5	61.7	70.9
13	Himachal Pradesh	54.2	65.4	97.0	227.9	44.6	84.7
14	Jammu & Kashmir	76.8	52.9	88.2	203.9	44.1	61.4
15	Jharkhand	57.4	48.8	81.0	213.0	34.1	67.8
16	Karnataka	59.4	67.7	84.9	220.3	40.5	76.9
17	Kerala	60.2	72.1	107.7	220.7	42	91.4
18	Ladakh	55.2	57.8	91.1	203.5	50.2	62.9
19	Lakshadweep	43.6	71.4	102.7	193.9	44.4	85.8
20	Madhya Pradesh	72.8	52.5	75.8	223.5	44.7	63.6
21	Maharashtra	65.8	65.5	90.1	234.3	49.7	76.6
22	Manipur	71.0	50.1	65.9	219.3	32.8	58.2
23	Meghalaya	31.6	45.2	60	202.8	31.5	46.8
24	Mizoram	44.8	50.4	71.5	204.1	31.5	61.9
25	Nagaland	46.4	49.5	71.7	210.3	35.7	55.0
26	Odisha	65.2	65.6	107.5	228.5	53.8	75.1
27	Puducherry	69.2	73.7	94.3	219.1	41.6	80.4
28	Punjab	113.4	65.4	103.4	227.4	47.5	74.0
29	Rajasthan	98.8	51.8	74.4	221.2	64.4	71.0
30	Sikkim	48.2	59.7	97.0	222.6	40.4	64.1
31	Tamil Nadu	41.2	65.9	99.6	234.9	47.8	69.9
32	Telangana	36.6	67.1	74.7	219.4	44.7	69.4
33	Tripura	53	61.1	77.2	215.4	32	61.7
34	Uttar Pradesh	49.4	51.8	77.8	227.1	53.3	68.7
35	Uttarakhand	56.4	60.8	80.2	216.1	42.3	70.4
36	West Bengal	72.8	57.8	80.4	222.7	32.2	67.9
	India average	60.4	59.7	88.9	219.5	45.9	71.0

Source: Government of India [5]

Table 3: Domain-wise Percentage Scores (%) Achieved in School Education across States/ UTs of India, 2022-23 &2023-24

	Total Weight (Score)	240	80	190	260	130	100
S. No.	State	Learning (LO)	Access (A)	Infrastructure (IF)	Equity (E)	Governance (GP)	Teacheredu (TE &T)
1	Andaman & Nicobar Islands	25.3	83.6	53.2	81.6	36.1	75.1
2	Andhra Pradesh	19.9	86.5	52.3	87.1	38.5	69.4
3	Arunachal Pradesh	18.8	54.0	33.6	82.5	23.8	63.8
4	Assam	26.1	57.5	42.6	86.5	34.5	52.1
5	Bihar	26.8	66.1	28.9	80.5	17.5	67.5
6	Chandigarh	43.2	90.5	77.9	83.3	59.0	85.7
7	Chhattisgarh	16.2	70.5	40.2	83.0	30.6	67.5
8	DNH&DD	17.8	73.3	63.6	88.7	43.8	82.6
9	Delhi	26.6	80.5	62.1	92.0	37.6	89.6
10	Goa	25.6	81.9	50.9	86.3	46.1	81.8
11	Gujarat	25.1	74.5	49.2	88.5	67.5	83.3
12	Haryana	32.7	78.4	48.4	86.7	47.5	70.9
13	Himachal Pradesh	22.6	81.8	51.1	87.7	34.3	84.7
14	Jammu & Kashmir	32.0	66.1	46.4	78.4	33.9	61.4
15	Jharkhand	23.9	61.0	42.6	81.9	26.2	67.8
16	Karnataka	24.8	84.6	44.7	84.7	31.2	76.9
17	Kerala	25.1	90.1	56.7	84.9	32.3	91.4
18	Ladakh	23.0	72.3	47.9	78.3	38.6	62.9
19	Lakshadweep	18.2	89.3	54.1	74.6	34.2	85.8
20	Madhya Pradesh	30.3	65.6	39.9	86.0	34.4	63.6
21	Maharashtra	27.4	81.9	47.4	90.1	38.2	76.6
22	Manipur	29.6	62.6	34.7	84.3	25.2	58.2
23	Meghalaya	13.2	56.5	31.6	78.0	24.2	46.8
24	Mizoram	18.7	63.0	37.6	78.5	24.2	61.9
25	Nagaland	19.3	61.9	37.7	80.9	27.5	55.0
26	Odisha	27.2	82.0	56.6	87.9	41.4	75.1
27	Puducherry	28.8	92.1	49.6	84.3	32.0	80.4
28	Punjab	47.3	81.8	54.4	87.5	36.5	74.0
29	Rajasthan	41.2	64.8	39.2	85.1	49.5	71.0
30	Sikkim	20.1	74.6	51.1	85.6	31.1	64.1
31	Tamil Nadu	17.2	82.4	52.4	90.3	36.8	69.9
32	Telangana	15.3	83.9	39.3	84.4	34.4	69.4
33	Tripura	22.1	76.4	40.6	82.8	24.6	61.7
34	Uttar Pradesh	20.6	64.8	40.9	87.3	41.0	68.7
35	Uttarakhand	23.5	76.0	42.2	83.1	32.5	70.4
36	West Bengal	30.3	72.3	42.3	85.7	24.8	67.9
	India average	25.2	74.6	46.8	84.4	35.3	71.0

Source: Authors' Calculation based on Government of India[5]

Table: 4 Domain-wise Ranks of States in respect of percentage scores in School Education across States/ UTs of India, 2022-23 & 2023-24

S. No.	State	Learning (LO)	Access (A)	Infrastructure (IF)	Equity (E)	Governance (GP)	Teacheredu (TE & T)	Rank Average	Final Rank
1	Andaman & Nicobar Islands	16	8	8	29	15	12	14.67	15
2	Andhra Pradesh	27	5	10	10	10	19	13.50	13
3	Arunachal Pradesh	29	36	34	27	35	27	31.33	35
4	Assam	14	34	21	12	16	35	22.00	25
5	Bihar	12	25	36	31	36	24	27.33	32
6	Chandigarh	2	2	1	23	2	4	5.67	1
7	Chhattisgarh	34	24	27	25	27	24	26.83	31
8	DNH&DD	32	21	2	4	6	7	12.00	10
9	Delhi	13	15	3	1	12	2	7.67	2
10	Goa	15	11	13	13	5	8	10.83	7
11	Gujarat	17	20	15	5	1	6	10.67	5
12	Haryana	4	16	16	11	4	16	11.17	9
13	Himachal Pradesh	23	13	11	7	19	5	13.00	11
14	Jammu & Kashmir	5	25	19	33	21	32	22.50	27
15	Jharkhand	20	33	21	28	29	23	25.67	28
16	Karnataka	19	6	20	19	25	10	16.50	17
17	Kerala	17	3	4	18	23	1	11.00	8
18	Ladakh	22	22	17	34	9	29	22.17	26
19	Lakshadweep	31	4	7	36	20	3	16.83	18
20	Madhya Pradesh	6	27	28	14	17	28	20.00	21
21	Maharashtra	10	11	18	3	11	11	10.67	5
22	Manipur	8	31	33	21	30	33	26.00	29
23	Meghalaya	36	35	35	35	33	36	35.00	36
24	Mizoram	30	30	32	32	33	30	31.17	34
25	Nagaland	28	32	31	30	28	34	30.50	33
26	Odisha	11	10	5	6	7	12	8.50	3
27	Puducherry	9	1	14	22	24	9	13.17	12
28	Punjab	1	13	6	8	14	14	9.33	4
29	Rajasthan	3	28	30	17	3	15	16.00	16
30	Sikkim	26	19	11	16	26	26	20.67	22
31	Tamil Nadu	33	9	9	2	13	18	14.00	14
32	Telangana	35	7	29	20	17	19	21.17	24
33	Tripura	24	17	26	26	32	31	26.00	29
34	Uttar Pradesh	25	28	25	9	8	21	19.33	19
35	Uttarakhand	21	18	24	24	22	17	21.00	23
36	West Bengal	6	22	23	15	31	22	19.83	20

Source: Authors' Calculation based on Government of India[5]

Table 5 presents the Pearson correlation coefficients among the percentage scores of the major domains of school education across 36 States/UTs of India. The results indicate that all domain-wise relationships are positive, suggesting that improvements in one aspect of school education are generally associated with better performance in other domains. Among the reported correlations, Access exhibits a strong and statistically significant positive association with Infrastructure ($r = 0.704$, $p < 0.001$) and Teacher Education ($r = 0.770$, $p < 0.001$), implying that states with better educational access also tend to have stronger physical infrastructure and teacher education systems. Similarly, Infrastructure shows significant positive correlations with Governance ($r = 0.614$, $p < 0.001$), Teacher Education ($r = 0.720$, $p < 0.001$), and Equity ($r = 0.362$, $p = 0.030$), highlighting the complementary role of institutional support and resource availability in strengthening educational outcomes. Governance is also positively associated with

Equity ($r = 0.420$, $p = 0.011$), Access ($r = 0.370$, $p = 0.027$), Learning ($r = 0.371$, $p = 0.026$), and Teacher Education ($r = 0.510$, $p < 0.001$), indicating that better governance practices contribute to more equitable and efficient education systems. Although Learning demonstrates positive correlations with all other domains, its relationships with Access, Infrastructure, Equity, and Teacher Education are relatively weak and statistically insignificant, except for Governance, suggesting that improvements in learning outcomes depend not only on physical and institutional inputs but also on the quality of governance and implementation. Overall, the findings reveal a high degree of interdependence among the domains of school education, emphasizing that balanced progress in access, infrastructure, governance, equity, and teacher education is essential for achieving sustained improvements in the quality of school education across Indian States and Union Territories.

Table 5: Correlation coefficient Matrix of Percentage Scores of domains of school education among the States of India (N=36)

		Learning	Access	Infrastructure	Equity	Governance	Teacheredu
Learning	Pearson Correlation	1	0.175	0.316	0.204	0.371	0.23
	Sig. (2-tailed)		0.308	0.061	0.234	0.026	0.18
Access	Pearson Correlation	0.175	1.000	0.704	0.271	0.370	0.77
	Sig. (2-tailed)	0.308		0.000	0.110	0.027	0.00
Infrastructure	Pearson Correlation	0.316	0.704	1.000	0.362	0.614	0.72
	Sig. (2-tailed)	0.061	0.000		0.030	0.000	0.00
Equity	Pearson Correlation	0.204	0.271	0.362	1.000	0.420	0.38
	Sig. (2-tailed)	0.234	0.110	0.030		0.011	0.02
Governance	Pearson Correlation	0.37	0.37	0.61	0.42	1.00	0.51
	Sig. (2-tailed)	0.03	0.03	0.00	0.01		0.00
Teacheredu	Pearson Correlation	0.23	0.77	0.72	0.38	0.51	1
	Sig. (2-tailed)	0.18	0.00	0.00	0.02	0.00	

VI. CONCLUSION

This study examined the quality of school education across 36 States and Union Territories of India using the Performance Grading Index (PGI) 2.0 for 2022–23 and 2023–24. Although India has achieved remarkable progress in expanding educational access, substantial gaps in educational performance remain across its states. This study breaks down school education into six core dimensions. Among these, the overall performance in equity, school accessibility, and teacher education and training is acceptable, while learning outcomes, infrastructure and supporting facilities, and governance processes have long been weak. Union territories and states such as Chandigarh, Delhi, and Kerala have balanced multi-dimensional development. The northeastern less developed states consistently face deficiencies in infrastructure, governance, and learning outcomes. West Bengal only meets the standards for learning outcomes and fails to achieve overall excellence, which confirms that single-dimensional advantages cannot support high-quality education across the board.

The correlation analysis of this study shows that the dimensions of school education—access, infrastructure,

governance, equity, and teacher education—are closely linked and have a significant positive correlation with each other. Based on this finding, this study deduces that isolated interventions targeting only one single field cannot improve education quality, and a comprehensive and integrated policy approach is required. Policymakers should prioritize strengthening institutional governance, upgrading infrastructure, improving the teacher professional development system, and optimizing monitoring and accountability mechanisms, while sustaining the existing achievements in education equity and access. India's PGI 2.0 framework can support all states and union territories in benchmarking their performance and identifying policy priorities. Future research can add district-level assessments, longitudinal tracking data, and the socioeconomic determinants of education quality, to clarify the driving factors behind education gaps, and provide support for the implementation of the National Education Policy 2020 and United Nations Sustainable Development Goal 4.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

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