



# The Right to Education Act (2009-2024): Quantitative Analysis of Enrollment, Retention, and Learning Outcomes Across Socio-Economic Strata

Sundaravally

Assistant Professor, Department of Education, Manonmaniam Sundaranar University, Abhishekapatti, Tirunelveli., India.

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## Abstract

This study examines the impact of India's Right of Children to Free and Compulsory Education Act, 2009 (RTE Act) on enrollment, retention, and learning outcomes across different socio-economic strata from 2009 to 2024. Using nationally representative datasets including the District Information System for Education (DISE), Annual Status of Education Report (ASER), and National Sample Survey (NSS), this quantitative analysis reveals significant increases in enrollment rates, particularly among marginalized communities, with overall school-going rates reaching 97.2% by 2018. However, the analysis uncovers a concerning paradox: while access to education has dramatically improved, learning outcomes have declined substantially, with test scores dropping precipitously after 2010. The study documents persistent disparities across socio-economic lines, with children from lower-income families, rural areas, and disadvantaged social groups experiencing disproportionate challenges in retention and learning achievement. These findings suggest that while the RTE Act has succeeded in expanding educational access, ensuring equitable learning outcomes remains a critical challenge requiring targeted interventions in teacher quality, infrastructure development, and pedagogical approaches.

**Keywords:** - Right To Education Act, Enrollment Rates, Learning Outcomes, Socio-Economic Disparities, Educational Equity, India

## I. INTRODUCTION

The Right of Children to Free and Compulsory Education Act (RTE Act), enacted on August 4, 2009, and implemented on April 1, 2010, represents a watershed moment in India's educational policy landscape. By making education a fundamental right under Article 21A of the Constitution, India joined 135 countries in recognizing free and compulsory elementary education as an entitlement for all children aged 6 to 14 years (Ministry of Human Resource Development, 2016). This legislation emerged from decades of advocacy and constitutional amendments, particularly the 86th Amendment of 2002, which laid the foundation for education as a fundamental right.

The RTE Act's implementation was predicated on four key provisions:

- Provision of free education in government schools for all children ages 6-14 years
- Prohibition of expulsion or grade retention until grade 8
- Mandatory 25% reservation in private schools for economically weaker sections (ews) and disadvantaged groups
- Establishment of minimum infrastructure and quality standards including adequate pupil-teacher ratios, provision of drinking water, separate toilets for girls and boys, libraries, and qualified teachers (Shah & Steinberg, 2019)

These provisions aimed to address India's longstanding challenges of educational access, quality, and equity.

After 15 years of implementation, a comprehensive assessment of the RTE Act's impact becomes both timely and critical. India's demographic dividend—with a projected one-third of the world's working-age population—depends fundamentally on the educational outcomes of today's children (KPMG, 2016). The success or failure of the RTE Act thus carries implications far beyond individual educational attainment, affecting national economic competitiveness, social mobility, and democratic participation.

### 1.1. Research Questions

This study addresses three primary research questions:

- How have enrollment and retention rates changed across different socio-economic strata following the RTE Act's implementation?
- What trends in learning outcomes are observable across socio-economic groups during the 2009-2024 period?
- To what extent do disparities in educational outcomes persist across different socio-economic strata despite universal access provisions?

### 1.2. Significance of the Study

This research contributes to the expanding literature on education policy effectiveness in developing contexts by providing quantitative evidence on the RTE Act's differential impacts across socio-economic groups. Understanding these disparities is essential for refining policy interventions and ensuring that educational expansion translates into genuine learning opportunities for all children. The findings inform ongoing debates about educational quality, resource allocation, and the design of inclusive educational systems in contexts of significant socio-economic heterogeneity.

## II. LITERATURE REVIEW

The literature on education policy in India reveals a complex narrative of expanding access alongside persistent quality challenges. This review examines research on enrollment trends, learning outcomes, and socio-economic disparities in the context of the RTE Act and related educational reforms.

### 2.1. Enrollment and Access Trends

Research consistently documents substantial increases in school enrollment following the RTE Act's implementation. (Shah & Steinberg, 2019) analyzed three nationally representative datasets—DISE, ASER, and NSS—and found that school-going increased significantly after 2009, with the most pronounced effects among older children (ages 13-16) and in districts with historically lower enrollment. By 2018, overall school enrollment had reached 97.2%, with marked increases in the enrollment of girls and children from marginalized communities (Mondal & Islam, 2021).

However, the enrollment gains have been uneven across school types. Between 2008-09 and 2014-15, the proportion of students enrolled in government schools declined from 71% to 62%, indicating a shift toward private schooling (PRS Legislative Research, 2016). This trend reflects growing parental preference for private institutions, driven by perceptions of superior quality, despite the RTE Act's provisions mandating quality standards in government schools.

### 2.2. Learning Outcomes and Quality Concerns

A concerning finding across multiple studies is the decline in learning outcomes following the RTE Act's implementation. (Shah & Steinberg, 2019) documented that test scores declined dramatically after 2010, with reading and arithmetic abilities deteriorating despite increased enrollment. The ASER 2024 report revealed that 76.6% of Class III government school students and 55.2% of Class V government school students remained unable to read Class II level text, indicating persistent foundational literacy gaps (Pratham, 2024).

The no-detention policy, which prohibited holding back students before Grade 8, has been implicated in these learning declines. (Kumar et al., 2019) found that the policy, while intended to reduce dropouts, may have inadvertently reduced academic rigor and teacher accountability. The policy's controversial amendment in 2019, allowing states to opt for examination-based detention in Classes 5 and 8, reflects ongoing debates about balancing access with academic standards.

### 2.3. Socio-Economic Disparities

Research reveals that socio-economic disparities in educational outcomes have persisted and, in some dimensions, widened during the post-RTE period. (Kumar et al., 2019) found that children from the bottom monthly per capita expenditure (MPCE) quintile, rural areas, and disadvantaged socio-religious groups experienced lower current attendance rates and higher dropout rates compared to their more privileged counterparts. Female children, particularly in rural areas, faced additional barriers including domestic responsibilities and early marriage (National Sample Survey Office, 2014).

The 25% EWS quota in private schools, designed to promote social integration, has shown mixed results. Research by (Sucharita & Sujatha, 2019) on implementation in Delhi schools found that while the quota increased access for disadvantaged children, effective social integration remained limited. EWS students often faced social marginalization, teacher bias, and struggled to maintain connections with both their home communities and their more affluent classmates. At the national level, only 25.5% of schools were found to be fully RTE compliant, with significant interstate variations in implementation (Centre for Social Development, 2024).

### 2.4. Infrastructure and Resource Constraints

Infrastructure deficits continue to impede effective RTE implementation. Although improvements have been

documented—with 95% of schools reporting drinking water and toilet facilities by 2023—significant gaps remain, particularly in electricity access and digital infrastructure. More than 60% of schools lack computers, and 90% lack internet facilities (ASER, 2023). Teacher shortages persist, with India facing a shortage of approximately 508,000 teachers nationwide, while reliance on contractual teachers and widespread absenteeism undermine instructional quality (Ministry of Human Resource Development, 2011).

### III. METHODOLOGY

#### 3.1. Research Design

This study employs a quantitative, longitudinal research design to analyze trends in enrollment, retention, and learning outcomes following the RTE Act's implementation. The analysis spans the 15-year period from 2009 to 2024, utilizing multiple nationally representative datasets to triangulate findings and ensure robustness. The research adopts a comparative approach, examining outcomes across different socio-economic strata including income quintiles, rural-urban locations, gender, and social categories.

#### 3.2. Data Sources

The study draws on three primary data sources:

- District Information System for Education (DISE/UDISE+): Administrative data providing comprehensive enrollment statistics, infrastructure metrics, and teacher data across all recognized schools in India. The database covers 2005-2024, enabling pre- and post-RTE comparisons.
- Annual Status of Education Report (ASER): Household-based surveys conducted by Pratham Education Foundation (2005-2024), assessing foundational reading and arithmetic skills among children ages 5-16 in rural India. ASER's citizen-led methodology reaches over 600,000 children annually across rural districts.
- National Sample Survey (NSS): Rounds 64 (2007-08), 66 (2009-10), 68 (2011-12), and 71 (2014) on social consumption in education, providing household-level data on attendance, expenditure, and socio-economic characteristics.

#### 3.3. Variables and Measures

##### 3.3.1. Dependent Variables:

- Enrollment Rate: Percentage of children aged 6-14 currently enrolled in educational institutions
- Retention Rate: Proportion of enrolled children who remain in school through specified grade levels (primary, upper primary, secondary)
- Learning Outcomes: Measured through ASER assessments
  - reading ability (ability to read Class II level text)
  - arithmetic ability (ability to perform basic subtraction and division)

##### 3.3.2. Independent Variables (Socio-Economic Strata):

- Economic Status: Measured by monthly per capita expenditure (MPCE) quintiles
- Geographic Location: Rural vs. urban residence
- Gender: Male vs. female students
- Social Category: Scheduled Castes (SC), Scheduled Tribes (ST), Other Backward Classes (OBC), and General Category
- School Type: Government vs. private school enrollment

#### 3.4. Analytical Approach

The analysis employs descriptive statistics to document trends over time, with particular attention to changes around the 2009-2010 implementation period. Comparative analyses examine differences across socio-economic strata at specific time points. The study presents data through tables showing enrollment rates, retention rates, and learning outcome percentages disaggregated by key demographic and socio-economic variables. Trends are assessed by comparing pre-RTE (2005-2009) and post-RTE (2010-2024) periods.

#### 3.5. Limitations

This study faces several limitations. First, the analysis is associational rather than causal; observed trends coincide with RTE implementation but cannot be definitively attributed to the Act alone, as other policies and socio-economic changes occurred concurrently. Second, ASER data covers only rural areas, limiting generalizability to urban populations. Third, learning outcome measures focus on foundational literacy and numeracy, not capturing broader competencies. Finally, data availability varies across years and measures, with some metrics showing gaps in certain periods.

### IV. RESULTS

#### 4.1. Enrollment Trends Across Socio-Economic Strata

The implementation of the RTE Act coincided with substantial increases in school enrollment across all socio-economic groups. Table 1 presents enrollment rates by key demographic characteristics for the pre-RTE (2007-08) and post-RTE (2018-19) periods, revealing both overall gains and persistent disparities.

Table 1. Enrollment Rates by Socio-Economic Characteristics: Pre-RTE vs. Post-RTE

Category	2007-08 (%)	2018-19 (%)	Change (pp)
Overall (Ages 6-14)	84.5	97.2	+12.7
Gender			
Male	86.1	97.5	+11.4
Female	82.7	96.9	+14.2
Location			
Rural	81.3	96.1	+14.8
Urban	92.4	99.1	+6.7
MPCE Quintile			
Bottom 20%	75.2	94.3	+19.1
Top 20%	94.8	99.5	+4.7

Note. MPCE = Monthly Per Capita Expenditure. Data derived from National Sample Survey rounds and DISE statistics. pp = percentage points.

Table 1 reveals several key patterns. Overall enrollment increased by 12.7 percentage points, reaching near-universal levels by 2018-19. Female enrollment gains (+14.2 pp) exceeded male gains (+11.4 pp), narrowing the gender gap from 3.4 to 0.6 percentage points. Rural areas experienced larger enrollment increases (+14.8 pp) compared to urban areas (+6.7 pp), though a 3.0 percentage point rural-urban gap persisted. Most notably, children from the bottom income quintile showed the largest enrollment gains (+19.1 pp), yet maintained a 5.2 percentage point deficit compared to the top quintile even in 2018-19.

#### 4.2. Retention and Dropout Patterns

While enrollment increased substantially, retention rates reveal continued challenges in keeping children in school through completion of various educational levels. Table 2 presents retention and dropout rates across educational levels for 2018-19, demonstrating marked declines as students progress through the educational system.

Table 2. Retention and Dropout Rates by Educational Level (2018-19)

Educational Level	Retention Rate (%)	Dropout Rate (%)	Educational Level
Primary (Classes I-V)	92.0	1.5	Primary (Classes I-V)
Upper Primary (Classes VI-VIII)	75.0	4.5	Upper Primary (Classes VI-VIII)
Secondary (Classes IX-X)	59.0	15.0	Secondary (Classes IX-X)
Higher Secondary (Classes XI-XII)	52.0	17.0	Higher Secondary (Classes XI-XII)

Note. Data from DISE 2018-19 and Education Statistics at a Glance 2019. Retention rates indicate percentage of students continuing through completion of the educational level.

Table 2 demonstrates a clear pattern of declining retention as students progress through educational levels. Primary retention remains high at 92%, consistent with the RTE Act's no-detention policy and its focus on elementary education. However, retention drops sharply to 75% at the upper primary level and further to 59% at the secondary level. Dropout rates follow an inverse pattern, rising from 1.5% at the primary level to 15% at secondary and 17% at higher secondary levels. These patterns underscore the particular vulnerability of the transition points between educational levels, especially from upper primary to secondary education.

#### 4.3. Learning Outcomes: The Quality Challenge

Perhaps the most concerning finding emerges from analysis of learning outcomes. While access to education expanded dramatically, fundamental reading and arithmetic abilities showed substantial declines following RTE implementation. Table 3 presents learning outcome trends from ASER data, comparing pre-RTE (2008) and recent (2024) assessments.

Table 3. Learning Outcomes: Percentage of Students Meeting Basic Competency Standards

Measure	Grade	2008 (%)	2024 (%)	Change (pp)
<b>Reading (Class II text)</b>				
Govt Schools	III	31.4	23.4	-8.0
Govt Schools	V	55.3	44.8	-10.5
Private Schools	V	79.2	73.1	-6.1
<b>Arithmetic (Subtraction)</b>				
Govt Schools	III	42.8	33.5	-9.3
Govt Schools	V	37.1	30.7	-6.4
Private Schools	V	68.5	61.2	-7.3

Note. Data from ASER 2008 and 2024. Reading ability measured as percentage of students able to read Class II level text. Arithmetic measured as percentage able to perform subtraction (Class III) or division (Class V).

Table 3 reveals the paradoxical outcome of the RTE Act: expanded access accompanied by declining learning achievement. Reading ability in government schools declined by 8.0 percentage points for Class III and 10.5 percentage points for Class V students between 2008 and 2024. Arithmetic skills showed similar patterns, with declines of 9.3 and 6.4 percentage points for Classes III and V respectively. Notably, private schools also experienced learning outcome declines, though from higher baseline levels. The government-private gap in Class V reading ability widened from 23.9 percentage points in 2008 to 28.3 percentage points in 2024, indicating that the quality differential between school types has increased during the post-RTE period.

## V. DISCUSSION

### 5.1. Interpretation of Findings

This analysis reveals a fundamental paradox in India's post-RTE educational landscape: substantial progress in access coexists with declining learning quality and persistent socio-economic disparities. The near-universal enrollment achieved by 2018-19 represents a historic accomplishment, bringing millions of previously excluded children into the educational system. The particularly large gains among disadvantaged groups—females, rural residents, and children from lower-income families—demonstrate that the RTE Act succeeded in its primary objective of expanding educational access.

However, the dramatic decline in learning outcomes raises critical questions about the nature of this expanded access. The 8-10 percentage point drops in basic reading and arithmetic abilities suggest that simply bringing children into classrooms has not translated into effective learning. Several mechanisms may explain this quality decline. First, the rapid enrollment expansion likely strained existing educational infrastructure and teacher capacity, resulting in larger class sizes and reduced individual attention. Second, the no-detention policy, while successful in reducing dropouts, may have reduced academic pressure and accountability. Third, the influx of children from disadvantaged backgrounds—who often face multiple learning barriers including malnutrition, inadequate home support, and language differences—into an educational system unprepared to address their specific needs likely contributed to declining average outcomes.

### 5.2. Socio-Economic Stratification and Educational Equity

The persistence and widening of learning outcome gaps across socio-economic strata despite universal enrollment provisions represents a critical failure of educational equity. The data reveal that while access has become more equitable, the quality of educational experiences remains profoundly stratified. Children from lower-income families, rural areas, and disadvantaged social groups are not only more likely to attend government schools (where learning outcomes are consistently lower) but also experience lower learning achievement even within the same school types.

This stratification reflects and perpetuates broader patterns of socio-economic inequality. The continued exodus to private schools among families who can afford it—despite the RTE Act's quality standards for all schools—indicates widespread perception that government schools provide inferior education. This perception becomes self-fulfilling as the most motivated and resourced families exit the government system, leaving behind increasingly concentrated disadvantage. The widening government-private achievement gap suggests that rather than converging toward uniform quality, India's educational system has become increasingly bifurcated.

### 5.3. Implementation Challenges and Systemic Constraints

The documented implementation challenges—only 25.5% of schools fully RTE compliant, persistent teacher shortages, inadequate infrastructure—point to fundamental tensions between the RTE Act's ambitious mandates and available resources. The Act prescribed detailed norms for infrastructure, teacher qualifications, and pupil-teacher ratios without ensuring corresponding resource flows. States facing fiscal constraints have struggled to meet these requirements, particularly in rural and remote areas where needs are greatest.

Teacher-related challenges appear particularly acute. The combination of teacher shortages, widespread absenteeism, and reliance on inadequately trained contractual teachers directly undermines learning quality. Even when teachers are present, many lack training in modern pedagogical methods appropriate for diverse classrooms. The influx of first-generation learners—children whose parents never attended school—requires teaching approaches that recognize and address specific learning barriers, yet teacher training has not adequately evolved to meet these needs.

### 5.4. Policy Implications

The findings carry several critical implications for educational policy. First, expanding access must be accompanied by simultaneous investments in quality. The RTE Act's experience demonstrates that legal mandates alone are insufficient; substantial resource commitments to teacher recruitment, training, and infrastructure are essential. Second, targeted interventions for disadvantaged students are necessary to address persistent learning gaps. Universal policies that provide identical resources to all students may perpetuate existing inequalities when students begin with vastly different starting points.

Third, the 25% EWS quota in private schools requires more thoughtful implementation to achieve genuine social integration. Current evidence suggests that physical co-location is insufficient; explicit efforts to prevent stigmatization, teacher bias, and social exclusion are necessary. Fourth, remedial education programs like Teaching at the Right Level (TaRL) that group children by learning level rather than age/grade show promise for addressing accumulated learning deficits and deserve wider implementation.

### 5.5. Theoretical Contributions

This study contributes to broader theoretical debates about education policy in developing contexts. The findings



support the distinction between quantitative expansion (enrollment) and qualitative improvement (learning) in educational systems, demonstrating that these dimensions can diverge significantly. The research also illustrates the limitations of supply-side interventions (building schools, hiring teachers) when demand-side constraints (poverty, malnutrition, parental education) and quality dimensions (teacher effectiveness, pedagogical appropriateness) remain unaddressed.

The persistent socio-economic stratification despite universal access provisions provides empirical support for theories emphasizing the role of social reproduction in maintaining inequality. Educational systems, even when formally open to all, can perpetuate advantage when quality differs systematically by socio-economic status. Breaking these patterns requires not merely expanding access but actively restructuring educational delivery to provide compensatory advantages to disadvantaged students.

## VI. CONCLUSION

The Right to Education Act represents a landmark achievement in India's educational history, successfully expanding access to schooling to near-universal levels and bringing millions of previously excluded children into classrooms. The substantial enrollment gains, particularly among marginalized groups, fulfill the Act's foundational promise of education as a fundamental right. However, this analysis reveals that expanded access has not translated into equitable learning outcomes.

The decline in learning outcomes following RTE implementation, combined with persistent and widening disparities across socio-economic strata, indicates that simply providing seats in classrooms is insufficient for ensuring meaningful educational opportunity. Children from disadvantaged backgrounds—those from lower-income families, rural areas, and marginalized social groups—continue to experience lower retention rates and learning achievement, perpetuating patterns of inequality despite formal access.

Moving forward, India's educational policy must shift focus from access to quality and equity in outcomes. This requires substantial investments in teacher recruitment, training, and accountability; targeted interventions to address specific learning barriers faced by disadvantaged students; improved infrastructure, particularly in underserved areas; and more effective implementation of provisions like the 25% EWS quota to achieve genuine social integration. The recent policy focus on foundational literacy and numeracy through initiatives like NIPUN Bharat represents a positive step, though early results suggest significant challenges remain.

The stakes could not be higher. With one-third of the world's working-age population projected to be in India, the quality of today's educational outcomes will determine tomorrow's economic competitiveness, social mobility, and democratic vitality. Ensuring that all children—regardless of socio-economic background—not only attend school but actually learn represents the fundamental challenge for the next phase of India's educational development. The RTE Act provided the foundation; building effective learning systems atop that foundation remains the critical unfinished agenda.

### 6.1. Future Research Directions

Several questions merit further investigation. First, more rigorous causal analysis using quasi-experimental designs could better isolate the RTE Act's specific effects from other contemporaneous changes. Second, qualitative research exploring how socio-economic disparities manifest in daily school experiences would deepen understanding of inequality reproduction mechanisms. Third, evaluation of specific interventions—remedial programs, teacher training initiatives, infrastructure improvements—could identify what actually works to improve learning for disadvantaged students. Finally, longitudinal studies tracking the long-term outcomes of RTE-era students would reveal how educational experiences translate into life outcomes, labor market success, and social mobility.

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