

Reforming School Education System of Bihar

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Abstract

This paper examines the structural and administrative challenges confronting school education in Bihar, focusing on enrolment trends, learning poverty, Pupil- teacher Ratio (PTR) disparities, and teacher preparation. It highlights systemic deficits in the State Council of Educational Research and Training (SCERT), District Institutes of Education and Training (DIETs), and Primary Teacher Education Colleges (PTECs), including ad-hoc-in-service training, textbook distribution delays, and bureaucratic overreach. To address these issues, the paper proposes key reforms: granting statutory and academic autonomy to SCERT, appointing academic domain experts to leadership roles, establishing university-level Departments of Education linked with DIETs, empowering school heads with management autonomy, and shifting educational administration from punitive oversight to resource-oriented support.

Keywords: School Education in Bihar, SCERT Restructuring, Pupil-Teacher Ratio, Teacher Training, Learning Poverty, Textbook Distribution, Educational Governance, School Leadership Autonomy.

School education in Bihar presents a severe structural paradox: near-universal gross enrolment coexists with staggering learning poverty, systemic administrative failures, and institutional decay. While physical access to schools has expanded drastically over the past two decades, the core academic architecture—ranging from in-service teacher training and textbook distribution to higher-level teacher preparation and administrative governance—suffers from deep-seated policy drift and excessive bureaucratic control.

Status of School Education: Enrolment, Infrastructure, and Learning Outcomes

Data from the Unified District Information System for Education Plus (UDISE+) and the Annual Status of Education Report (ASER) published by Pratham paint a sobering picture of Bihar's school education landscape.

Enrolment & Retention vs. Gradual Dropout

- Elementary Level (Grades I–VIII): Gross Enrolment Ratio (GER) at the primary level has consistently crossed 98%. Interventions such as the Mid-Day Meal scheme, free uniforms, and bicycle distribution have driven high initial enrolment.
- Secondary & Higher Secondary Level: Retention drops sharply as children transition to higher grades. The primary dropout rate remains around 8.2%, but cumulative attrition peaks at the transition to upper primary and secondary stages (where secondary dropout rates hover near 12.6% to 15%). Socio-economic compulsions, seasonal migration, early marriage, and distance to secondary schools drive this drop.

Enrolment Trend (Grades 1 to 12)

[Primary (1-5)] ~98% =====> High Access

[Upper Pri (6-8)] ~85% =====> Transition Loss

[Secondary (9-10)] ~79% =====> Sharp Attrition

[Sr Secondary] ~55% =====> Severe Dropout

Physical & Learning Infrastructure

- Physical Infrastructure: School building coverage has expanded significantly, with over 95% of schools having functional drinking water facilities and basic toilet blocks. However, functional girl-friendly toilets, electricity continuity, ramps for children with special needs (CWSN), and science laboratories remain severely inadequate in rural pockets.
- Learning Infrastructure & Achievement: Computer labs, smart classrooms, and library usage are largely non-functional or absent in rural government schools. ASER reports consistently show that fewer than 45% of Std V students in rural Bihar can read a Std II-level text or perform basic 3-digit by 1-digit division. Foundational Literacy and Numeracy (FLN) targets remain severely compromised.

Cumulative Status Verdict

Bihar has successfully solved the problem of schooling access, but it has largely failed to deliver education quality. The state is trapped in a low-learning equilibrium where years of schooling do not translate into equivalent grade-level learning competencies.

Pupil-Teacher Ratio (PTR) and Teacher Quality

Pupil-Teacher Ratio (PTR): Bihar vs. High-Performing States

The National Education Policy (NEP) 2020 mandates a PTR under 30:1 for primary schools and 25:1 for socio-economically disadvantaged regions. Bihar fails this benchmark significantly due to massive teacher shortages and improper spatial deployment.

Level / Region	Bihar PTR (UDISE+)	Kerala	Tamil Nadu	NEP 2020 Standard
Primary (I–V)	42.3 : 1	16.5 : 1	20.1 : 1	30 : 1
Secondary (IX–X)	35.2 : 1	15.8 : 1	19.5 : 1	30 : 1
Rural Deployment	~45.0 : 1 (High deficit)	~17.0 : 1	~21.0 : 1	30 : 1
Urban Deployment	~32.0 (Surplus/Balance d)	~15.0 : 1	~18.0 : 1	30 : 1

The rural-urban imbalance in Bihar is severe: urban centers and district headquarters often have excess teachers due to political and administrative lobbying, while remote rural schools operate with single teachers or massive class sizes exceeding 60:1.

Teacher Quality, Skills, and Pre-Service Training

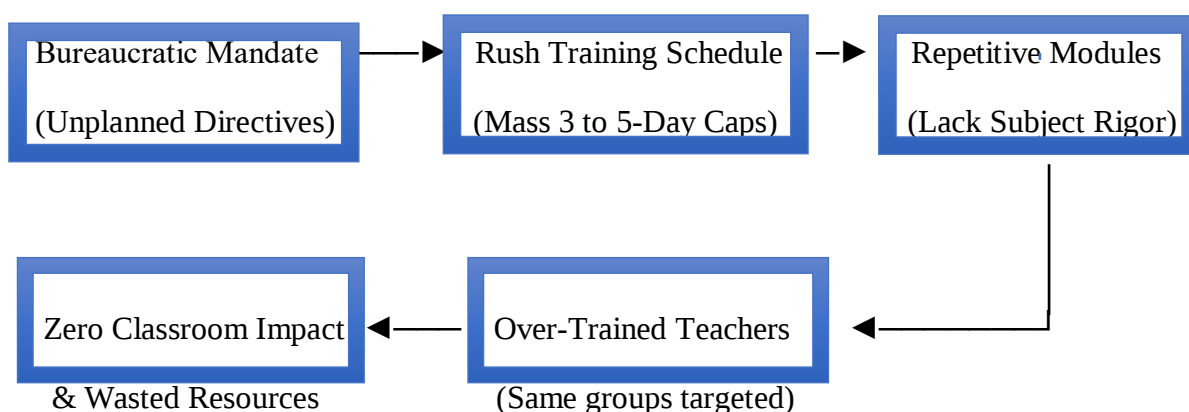
While mass recruitment drives (such as the Bihar Teacher Recruitment Exams conducted by BPSC) have raised basic educational credentials, teacher quality remains constrained by historical deficits:

- Contractual Legacy: Millions of Niyojit Shikshak were hired over two decades with minimal pre-service vetting, creating a wide baseline variance in subject content mastery.
- Pre-Service Training Quality: Private Teacher Training Institutes (PTIs) across Bihar proliferated as commercial entities, issuing D.El.Ed and B.Ed degrees without proper attendance, practical classroom training, or lab work.

Analysis of In-Service Teacher Training (SCERT, DIETs, PTECs)

The in-service training landscape in Bihar—managed by the State Council of Educational Research and Training (SCERT), District Institutes of Education and Training (DIETs), and Primary Teacher Education Colleges (PTECs)—is crippled by systemic ad-hocism.

Current Short-Duration Training Cycle



Planned Schedules vs. Haphazard Implementation

- Absence of Advance Academic Calendars: In-service trainings (typically 3-day to 5-day residential programs) are rarely scheduled according to a well-structured annual academic calendar. Instead, they are organized in response to sudden departmental directives or budget exhaustion targets at the end of financial quarters.
- Superficial Modules: Training modules are rushed out without rigorous needs-analysis. They tend to focus on generic, vague pedagogy rather than hard subject-specific content mastery (e.g., teaching fractions, foundational phonics, or science experiments).
- Redundant Targeting & Resource Waste: Due to the absence of a centralized Teacher Management Information System (TMIS), the same easily accessible group of teachers from nearby blocks is repeatedly called for multiple short-duration sessions. Meanwhile, teachers in remote rural areas receive zero training for years.
- Faculty Unpreparedness: Teacher educators at DIETs, PTECs, and SCERT rarely design their own modules or receive orientation before running sessions. Modules are routinely copied from central templates or outsourced to external non-governmental agencies without local adaptation.

SCERT Bihar: Institutional Capacity, Textbooks, and Bureaucratic Control

SCERT Bihar vs. High-Performing States

SCERT Bihar functions primarily as an administrative appendage of the State Department of Education rather than an autonomous academic think tank.

SCERT Governance Models

Bihar SCERT

IAS/Bureaucracy Headed —► Administrative Orders —► Low Research & Poor Textbooks

Kerala / TN SCERT

Academic/Professor Headed —► Pedagogical Research —► High Quality Textbooks & Modules

Dimension	SCERT Bihar	SCERT Kerala / Tamil Nadu
Leadership	Headed by IAS officers/bureaucrats	Headed by renowned Senior Educationists / Academics
Faculty Strength	Massive vacancy rate (>60%); reliance on deputed school teachers	Full-fledged academic cadre with specialized domain Ph.Ds
Research Output	Negligible action research; limited impact evaluations	Continuous classroom research, diagnostic assessments, and curriculum updates

EdTech & AI Integration	Basic digital portals; minimal indigenous content creation	Dedicated EdTech wings, digital content labs, and adaptive learning platforms
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The Crisis of School Textbooks

Historically, the Bihar State Textbook Publishing Corporation (BSTPC) produced high-quality, academically rigorous, and error-free textbooks drafted by top university scholars. Today, the textbook distribution system faces severe structural breakdown:

- **Deteriorating Content Quality:** Recent textbook revisions have suffered from poor editing, factual errors, weak paper quality, and outdated pedagogical framing due to the exclusion of subject experts during drafting.
- **Chronic Supply Delays:** Students routinely receive textbooks late in the academic session—often 6 to 9 months after classes commence, and sometimes at the very end of the academic year.
- **Causes of Delay:** Bureaucratic bottlenecks, delayed tender processes, printing clearances, funds distribution friction, and centralized supply-chain failures.
- **Impact:** Bureaucratic indifference to supply schedules directly compromises learning continuity, forcing rural students to navigate the academic year without core learning materials.

Autonomy and Restructuring Requirements

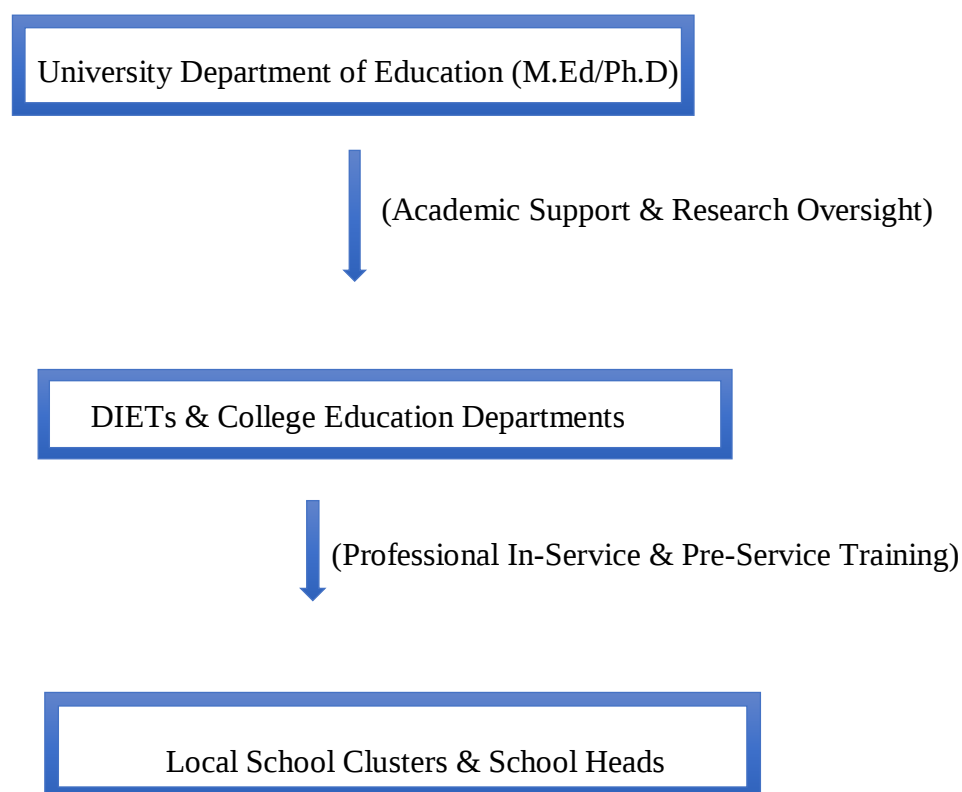
To break this stagnation, SCERT Bihar must be restructured through legislative and administrative reform:

1. **Academic Leadership:** Directorship of SCERT must be reserved for eminent education scholars or senior university professors, eliminating administrative IAS postings at the head of academic bodies.
2. **Statutory Autonomy:** SCERT should be converted into an autonomous statutory body (similar to the NCERT model) with independent financial and academic decision-making powers.
3. **Faculty Capacity Building:** Immediate recruitment of full-time faculty across specialized departments, including Curriculum Design, Assessment Systems, Educational Technology, Artificial Intelligence in Education, and Inclusive Pedagogy.

Reforming Higher Teacher Education and Academic Linkages

The decoupling of university academia from elementary teacher preparation has isolated DIETs and PTECs from contemporary educational research.

Proposed Integrated Academic Ecosystem



University Departments of Education

Currently, higher education in Bihar neglects teacher preparation; outside of Patna University, state universities lack robust, full-fledged Department of Education faculties.

- **Mandatory Departments:** Public universities across Bihar must establish standalone Departments of Education strictly compliant with NCTE and UGC norms, staffed by qualified Assistant Professors, Associate Professors, and Professors.
- **Organic Academic Linkages:** University Departments of Education should be given statutory mandate to provide academic oversight, curriculum design, and research support to all DIETs, PTECs, and teacher training colleges within their territorial jurisdiction.
- **Action Research Integration:** M.Ed and Ph.D research scholars must be embedded in local DIETs and government schools to conduct longitudinal studies on learning deficits and pedagogical interventions.

Governance Reform: School Leadership, Administrative Boundaries, and Teacher Respect

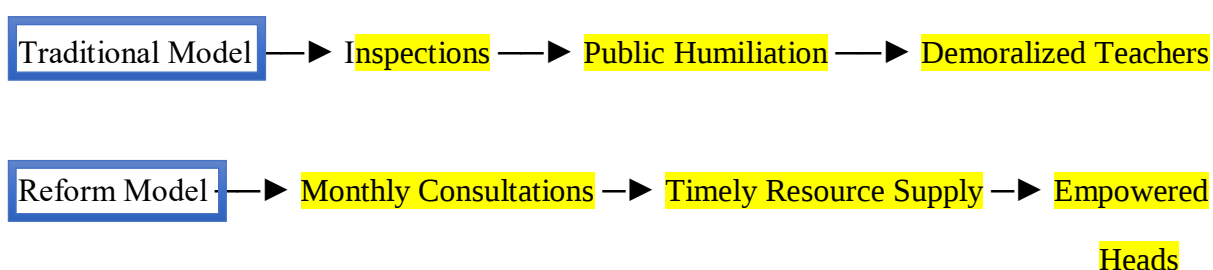
Empowerment of School Heads

- Universal Appointment: Every primary, upper primary, and secondary school must have a designated, permanent Principal/Headmaster appointed through competitive merit examinations.
- Management & Leadership Training: School Heads must undergo rigorous training in modern school management, financial administration, institutional planning, and empathetic leadership at institutions like NIEPA or IIMs.
- Curricular & Evaluative Autonomy: Principals should be granted functional autonomy to adapt school-level timetables, remedial learning models, and local continuous assessments within broad SCERT/NCERT frameworks.

Redefining the Bureaucratic Role

The administrative apparatus must shift from a punitive model to a supportive service delivery framework:

Bureaucracy-School Relationship Shift



- Resource Delivery Focus: The primary function of district education administration (DEOs, DPOs, BEOs) must be limited to providing infrastructure, grants, textbooks, and salaries on time.
- Fortnightly Consultations: Frontline education bureaucrats must hold mandatory fortnightly or monthly consultation meetings with School Heads to solve operational issues collaboratively.
- Administrative Training: Bureaucrats assigned to the education sector must undergo mandatory orientation in educational administration to prevent autocratic governance styles.
- Dignity and Accountability: Public humiliation, arbitrary suspensions, and hostile rhetoric targeted at teachers must be strictly prohibited. Teacher accountability must be

built through internal peer reviews, student learning outcomes, and professional development metrics—not bureaucratic coercion.

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About the Author

Dr. Khagendra Kumar is retired Professor, Head and Dean Faculty of Education, Patna University. He served as Principal, Patna Training College, Patna University. He also served as Development Officer, Liaison Officer, Director, Directorate of Education, Chair Professor, Dr. Ambedkar Centre and Registrar of Patna University. He has superannuated from the active service of Patna University on 30 June 2026.