

Vanishing Teachers in India: Declining Teacher Education, Teacher Shortages, and the Changing Professional Landscapes with Overflow of Students in Select Professional Courses

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Abstract

Teachers constitute the foundation of every successful educational system, serving as the primary agents of knowledge dissemination, character formation, and national development. However, India is currently experiencing a critical challenge characterized by the gradual decline in the availability of qualified, competent, and professionally trained teachers, particularly at the secondary school level and in higher education institutions. While the country has witnessed rapid expansion in engineering, medicine, management, and other professional programmes, teacher education has experienced declining enrolment, diminishing social prestige, inadequate recruitment, and increasing attrition. This paradox has given rise to the phenomenon of "vanishing teachers," which poses a serious threat to educational quality, equity, and the achievement of national development goals.

This study examines the historical evolution of teacher education in India from 1948 to 2025 by reviewing major educational commissions, policy reforms, regulatory frameworks, and institutional developments. It investigates the changing status of the teaching profession, declining enrolment in Bachelor of Education (B.Ed.) and Diploma in Elementary Education (D.El.Ed.) programmes, teacher shortages, workforce planning challenges, and the scarcity of quality teachers in secondary schools, colleges, and universities. Particular emphasis is placed on the shortage of subject-specialist teachers in Mathematics, Science, English, and other core disciplines, alongside the growing deficit of qualified faculty in higher education institutions. The study further explores the socio-economic, institutional, and policy factors responsible for declining interest in teaching as a profession, including limited career advancement, comparatively lower remuneration, administrative workload, professional dissatisfaction, and changing career aspirations among young graduates.

The paper also presents an international comparative analysis of teacher recruitment, preparation, professional development, and retention practices in Finland, Singapore, Japan, South Korea, and OECD countries to identify best practices that may inform educational reforms in India. Through an extensive review of policy documents, government reports, international publications, and scholarly literature, the study argues that addressing the teacher shortage requires comprehensive reforms in teacher education, recruitment, professional development, workforce planning, and public perception of the teaching profession. The findings highlight that revitalizing the teaching profession is essential for ensuring quality education, strengthening human capital, promoting educational excellence, and realizing India's vision of becoming a globally competitive knowledge society.

Keywords: *Teacher Education in India; Teacher Shortage; Teacher Attrition; Teacher Professional Development; Workforce Planning; Secondary School Teachers; Higher Education Faculty; National Education Policy (NEP 2020)*

Introduction

Teachers are the foundation of every educational system and play a decisive role in shaping the intellectual, social, economic, and cultural development of a nation. The quality of education depends primarily on the competence, commitment, professional preparation, and continuous development of teachers, making them the most valuable human resource in any educational system [1], [3], [10], [14]. Although India has made significant progress in expanding school education and higher education since independence, the country is witnessing an alarming decline in the availability of qualified and professionally trained teachers. While enrolment in professional programmes such as engineering, medicine, management, and information technology has increased considerably, teacher education programmes have experienced declining enrolment, diminishing social prestige, and persistent recruitment challenges [2], [4], [6], [8]. This emerging phenomenon, referred to in this study as the "vanishing teacher" crisis, threatens educational quality, equity, workforce sustainability, and the realization of Sustainable Development Goal 4 (Quality Education) [3], [13], [40].

Historically, teaching occupied one of the most respected positions in Indian society, with the *Guru* regarded as the central figure in intellectual and moral development. Following independence, several landmark commissions - including the University Education Commission (1948–49), the Secondary Education Commission (1952–53), and the Education Commission (Kothari Commission, 1964–66) - emphasized that the quality of an education system cannot exceed the quality of its teachers [27]–[29]. Subsequent reforms, including the establishment of the National Council for Teacher Education (NCTE), the National Curriculum Framework for Teacher Education, and the National Education Policy (NEP) 2020, sought to professionalize teacher education through improved curricula, accreditation, recruitment, and professional standards [1], [5], [30], [31]. Nevertheless, rapid commercialization of teacher education institutions, declining interest among academically talented graduates, irregular recruitment practices, contractual appointments, limited career advancement, and increasing administrative responsibilities have significantly reduced the attractiveness of teaching as a profession [6], [17], [21], [22], [41]. These challenges are particularly evident at the secondary school level, where shortages of qualified teachers in Mathematics, Science, English, and other core disciplines continue to affect learning outcomes and educational quality [2], [4], [7], [9].

Against this backdrop, the present study investigates the phenomenon of vanishing teachers in India by examining the historical evolution of teacher education between 1948 and 2025, declining enrolment in teacher education programmes, teacher workforce planning, professional motivation, recruitment, retention, and the growing scarcity of quality teachers in secondary schools, colleges, and universities. The study also analyses international best practices from Finland, Singapore, Japan, South Korea, and other OECD countries, where teaching continues to be regarded as a highly respected, research-oriented, and professionally rewarding career [11], [12], [15], [16], [35], [37]. By synthesizing government reports, policy documents, international publications, and contemporary research, this paper proposes evidence-based strategies for revitalizing teacher education, strengthening workforce planning, enhancing teacher motivation, and restoring the prestige of the teaching profession. Such reforms are essential for ensuring quality education, improving learning outcomes,

strengthening human capital, and achieving India's long-term vision of becoming a globally competitive knowledge society [3], [10], [20], [32], [39].

1. Literature Review

The teaching profession has long been recognized as the cornerstone of educational quality and national development. Extensive international research consistently demonstrates that student achievement, educational equity, and national competitiveness are closely associated with the availability of qualified, motivated, and professionally prepared teachers. Consequently, teacher education, teacher recruitment, retention, and professional development have become central themes in educational research across the world. However, the emerging phenomenon of teacher shortages has shifted scholarly attention from merely improving teacher quality to ensuring the long-term sustainability of the teaching workforce.

The historical development of teacher education in India has been shaped by several landmark educational commissions and policy reforms. The University Education Commission (1948–49) first emphasized the need for professionally trained teachers capable of promoting democratic citizenship and national development [27]. This vision was strengthened by the Secondary Education Commission (1952–53), which recommended specialized teacher preparation for secondary education and improved service conditions [28]. Subsequently, the Education Commission (Kothari Commission, 1964–66) asserted that "the destiny of India is now being shaped in her classrooms" and argued that no education system could exceed the quality of its teachers [29]. These foundational reports established teacher education as a national priority and laid the groundwork for subsequent institutional reforms.

During the last three decades, research on teacher education has expanded considerably. Rajput [21], Sharma [22], and Passi [23] examined the philosophical, pedagogical, and professional dimensions of teacher education in India and emphasized continuous professional development as an essential characteristic of effective teachers. Buch's Fourth and Fifth Surveys of Educational Research [24], [25] documented the evolution of educational research in India and highlighted persistent concerns relating to curriculum relevance, teacher competency, institutional quality, and classroom practices. These studies collectively indicate that although teacher education expanded significantly after independence, issues concerning quality assurance, practical training, and institutional effectiveness have remained unresolved.

The establishment of the National Council for Teacher Education (NCTE) marked a significant milestone in regulating teacher education programmes and maintaining academic standards. The National Curriculum Framework for Teacher Education (NCFTE-2009) advocated reflective teaching, learner-centred pedagogy, professional ethics, and continuous professional development [5]. Subsequently, NCTE policy documents highlighted persistent concerns regarding the uneven quality of teacher education institutions, inadequate field-based experiences, weak institutional accountability, and the need for stronger professional standards [30], [31]. More recently, the National Education Policy (NEP) 2020 proposed a comprehensive restructuring of teacher education by introducing a four-year integrated teacher education programme and strengthening merit-based recruitment, multidisciplinary preparation, and professional development [1]. Nevertheless, several researchers argue that implementation challenges continue to limit the effectiveness of these reforms [41], [42].

Teacher shortages have emerged as one of the most significant educational challenges worldwide. UNESCO's *Global Report on Teachers* estimates that millions of additional

teachers will be required globally by 2030 to achieve Sustainable Development Goal 4 [3]. Similarly, UNESCO's *State of the Education Report for India: No Teacher, No Class* identified substantial shortages of qualified teachers across Indian schools, particularly in rural and disadvantaged regions, emphasizing that teacher shortages influence both educational access and learning quality [2]. International organizations, including the OECD, World Bank, and UNESCO Institute for Statistics, further argue that improving educational outcomes depends not merely upon increasing teacher numbers but upon attracting, preparing, supporting, and retaining highly competent professionals throughout their careers [10]–[13].

Several studies have examined the changing status of the teaching profession and its declining attractiveness among young graduates. Darling-Hammond [14], [33], [34] argued that teacher quality remains the single most influential school-based factor affecting student learning and emphasized rigorous teacher preparation, mentoring, and professional autonomy. Hargreaves and Fullan [15] introduced the concept of *professional capital*, suggesting that educational excellence depends upon investing in teachers' knowledge, collaborative practices, and professional judgment rather than relying solely on accountability measures. Fullan [16] similarly emphasized that sustainable educational reform requires motivated teachers, institutional support, and continuous professional learning. These perspectives collectively suggest that teacher shortages cannot be addressed exclusively through recruitment; they also require policies that improve professional identity, career progression, and workplace satisfaction.

Indian studies have increasingly examined teacher shortages from labour-market and workforce-planning perspectives. Tilak [17] observed that rapid expansion in higher education has not necessarily translated into improved employability within the teaching profession because graduates increasingly prefer careers offering better salaries, professional recognition, and advancement opportunities. Kingdon [18] argued that India's educational challenges involve not only teacher shortages but also inefficient deployment, uneven distribution, and inadequate governance mechanisms affecting teacher availability across states. Recent analyses by Sinha and Kumar [41] further highlight declining enrolment in teacher education institutions, commercialization of B.Ed. programmes, and the urgent need to improve teacher preparation in response to NEP 2020.

An equally important concern emerging from recent literature is the declining enrolment in teacher education programmes. While professional education in engineering, medicine, management, and information technology has expanded rapidly, enrolment in teacher education has either stagnated or declined in several regions of India [6], [8]. This trend raises serious concerns regarding the future availability of qualified teachers, particularly for secondary education where demand for subject-specialist teachers continues to increase. Workforce planning has therefore become an important policy priority, requiring accurate forecasting of teacher demand, retirement trends, regional disparities, and subject-specific shortages [3], [4].

International evidence provides valuable lessons for strengthening teacher education systems. Finland, Singapore, Japan, and South Korea consistently rank among the world's highest-performing education systems because they recruit academically talented candidates into teaching, provide research-based teacher education, ensure continuous professional development, and maintain high social respect for teachers [11], [12], [35], [37]. Delors [32] also emphasized lifelong learning and teacher professionalism as essential components of quality education in the twenty-first century. These international experiences

suggest that improving educational quality requires long-term investment in teacher preparation, professional autonomy, and evidence-based workforce planning rather than short-term recruitment initiatives alone.

Although substantial literature exists on teacher education, teacher quality, professional development, and educational reforms, relatively limited research has examined these issues collectively within the framework of the emerging "vanishing teachers" phenomenon in India. Most previous studies have investigated teacher shortages, recruitment policies, or teacher education independently, whereas few have integrated historical evolution, declining enrolment, workforce planning, professional motivation, secondary-school teacher shortages, higher education faculty shortages, and international comparisons into a comprehensive analytical framework. Furthermore, limited attention has been devoted to understanding the paradox of declining interest in teaching despite rising demand for qualified educators and the simultaneous expansion of other professional education sectors.

Research Gap

The existing literature demonstrates that teacher shortages in India represent a multidimensional challenge involving teacher education, workforce planning, recruitment, retention, professional status, and educational governance. However, a comprehensive investigation integrating the historical evolution of teacher education (1948–2025), declining enrolment in teacher education programmes, shortages of subject-specialist teachers at the secondary level, faculty shortages in higher education, and international best practices remains largely absent. This study seeks to address this gap by proposing the concept of "Vanishing Teachers" as a broader analytical framework for understanding India's emerging teacher workforce crisis and by identifying evidence-based policy interventions capable of strengthening teacher education and ensuring the long-term sustainability of the teaching profession.

2. Evolution of Teacher Education in India (1948–2025) and the Emerging Teacher Workforce Crisis

A. Historical Evolution of Teacher Education

Teacher education in India has undergone significant transformation since Independence, reflecting the country's changing educational priorities, socio-economic development, and policy reforms. During the pre-independence period, teacher preparation was largely confined to normal schools and training colleges with limited institutional support. After 1947, however, teacher education became an integral component of national development, as policymakers recognized that educational quality depended fundamentally upon the competence and professionalism of teachers.

The University Education Commission (1948–49) was the first national commission to emphasize professional teacher preparation and recommended improving the academic qualifications, service conditions, and professional status of teachers [27]. Shortly thereafter, the Secondary Education Commission (1952–53) highlighted the importance of specialized teacher preparation for secondary education and advocated continuous in-service training to improve instructional quality [28]. These recommendations laid the foundation for systematic teacher education across schools and universities.

A major turning point occurred with the Education Commission (Kothari Commission, 1964–66), which declared that *"the destiny of India is now being shaped in her classrooms"* and asserted that no education system could rise above the quality of its teachers [29]. The Commission recommended strengthening teacher education institutions, improving salaries and career progression, expanding research in education, and promoting professionalism within the teaching community. Many of these recommendations continue to influence educational policy today.

During the 1970s and 1980s, teacher education expanded rapidly with the establishment of Colleges of Education, Departments of Education in universities, District Institutes of Education and Training (DIETs), Colleges of Teacher Education (CTEs), and Institutes of Advanced Study in Education (IASEs). The establishment of the National Council for Teacher Education (NCTE) as a statutory body in 1995 marked another milestone by introducing national standards, accreditation procedures, curriculum regulations, and institutional quality assurance [5], [30]. The National Curriculum Framework for Teacher Education (2009) further promoted reflective teaching, learner-centred pedagogy, inclusive education, and professional ethics [5].

The National Education Policy (NEP) 2020 introduced the most comprehensive reform in teacher education in recent decades. It proposed replacing fragmented teacher education programmes with a four-year Integrated Teacher Education Programme (ITEP), strengthening multidisciplinary teacher preparation, improving admission standards, promoting continuous professional development, and introducing transparent, merit-based recruitment systems [1]. These reforms seek to restore the prestige of teaching while improving teacher quality to meet the demands of twenty-first-century education.

Despite these policy initiatives, implementation has remained uneven. Several studies indicate that teacher education institutions continue to experience declining admissions, inadequate practical exposure, variable institutional quality, and weak linkages between teacher preparation and school realities [6], [41], [42]. Consequently, India now faces the dual challenge of maintaining educational expansion while ensuring an adequate supply of professionally competent teachers.

B. Current Status of Teacher Education in India

India possesses one of the world's largest teacher education systems. Thousands of institutions offer programmes such as B.Ed., D.El.Ed., M.Ed., and Integrated Teacher Education Programmes, supplying teachers for elementary, secondary, and higher secondary education. Nevertheless, quantitative expansion has not always translated into qualitative improvement.

Recent reports from the Ministry of Education, NCTE, AISHE, and UNESCO indicate several emerging concerns [2], [4], [6], [8]:

- ⇒ Declining enrolment in teacher education programmes in several states.
- ⇒ Closure or underutilization of many private teacher education institutions.
- ⇒ Uneven quality of teacher preparation across institutions.
- ⇒ Shortages of subject-specialist teachers in secondary schools.
- ⇒ Growing dependence on contractual and temporary appointments.
- ⇒ Increasing mismatch between teacher supply and actual workforce demand.

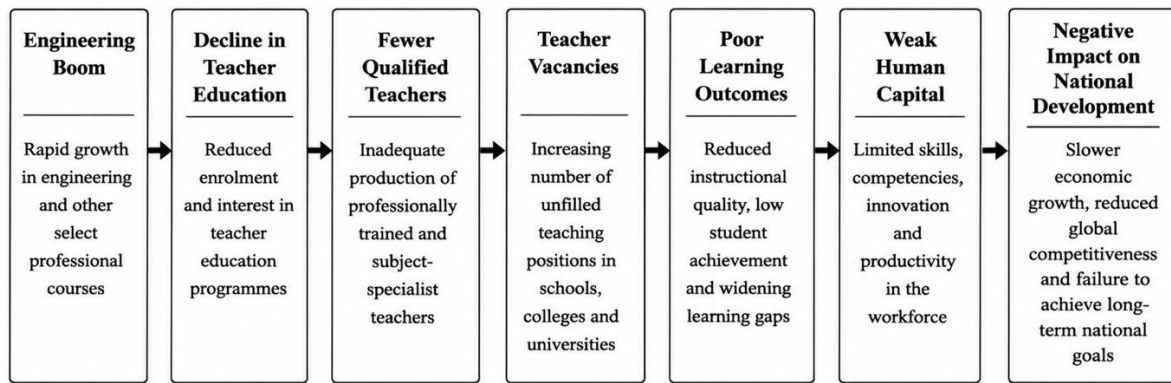


Figure 1. Conceptual framework developed from the synthesis of educational policy documents, teacher education literature, and workforce studies

Source: Compiled from References [1]–[17], [21]–[43].

Simultaneously, India's school education system continues to expand, increasing demand for qualified teachers in Mathematics, Science, English, Computer Science, and regional languages. Workforce planning has therefore become increasingly complex, requiring better coordination among universities, teacher education institutions, state governments, and recruitment agencies.

The paradox is evident: India produces millions of graduates annually, yet many schools continue to function without adequate numbers of qualified teachers. This indicates that the present challenge is not solely one of numerical shortage but also of workforce planning, deployment, employability, and professional attractiveness [3], [17], [18].

Year	Commission / Policy	Major Contribution	Long-term Impact
1948–49	University Education Commission	Professionalization of teacher education	Improved academic standards
1952–53	Secondary Education Commission	Subject-specialist teacher preparation	Strengthened secondary education
1964–66	Kothari Commission	Teacher quality as the foundation of educational quality	Comprehensive educational reforms
1986	National Policy on Education	Expansion of teacher education institutions	Establishment of DIETs and CTEs
1995	NCTE Act	Statutory regulation and accreditation	Standardization of teacher education
2009	NCFTE	Reflective and learner-centred teacher preparation	Curriculum modernization
2020	National Education Policy	Four-year Integrated Teacher Education Programme	Professionalization and multidisciplinary preparation

Table 1. Major Milestones in the Evolution of Teacher Education in India (1948–2025)

Source: Compiled from References [1], [5], [27]–[31].

C. Emerging Teacher Workforce Crisis

Although India has significantly expanded educational infrastructure during the past three decades, teacher availability has not kept pace with increasing educational demand. UNESCO identifies teacher shortages as one of the greatest barriers to achieving equitable and quality education worldwide [3]. Similar concerns are evident in India, where vacancies remain persistent despite the availability of educated graduates.

The shortage is particularly severe at the secondary school level because schools increasingly require qualified teachers capable of delivering competency-based curricula in Mathematics, Science, English, Information Technology, and interdisciplinary subjects. Simultaneously, colleges and universities report shortages of qualified faculty members, particularly in STEM disciplines, teacher education, and emerging interdisciplinary fields [8].

Several interconnected factors contribute to this workforce crisis:

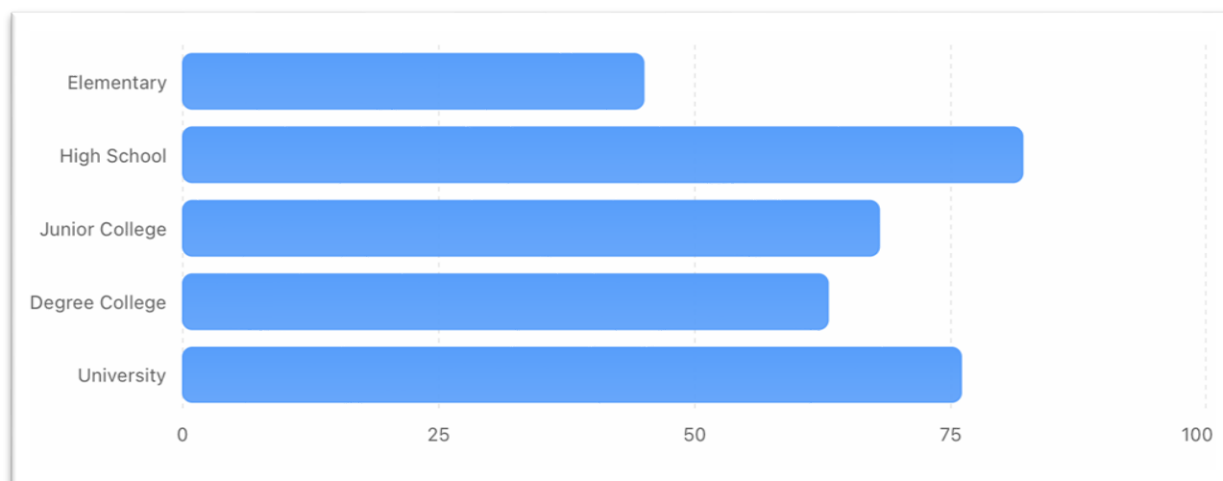
- ⇒ Declining interest in teaching among high-achieving graduates.
- ⇒ Expansion of alternative professional careers with better remuneration.
- ⇒ Delays in teacher recruitment and appointment.
- ⇒ Increasing contractual employment.
- ⇒ Regional imbalances in teacher deployment.
- ⇒ Retirement of experienced teachers without proportional replacement.
- ⇒ Declining enrolment in teacher education programmes.

Consequently, India is gradually experiencing what this study conceptualizes as the "Vanishing Teacher Syndrome"—a multidimensional phenomenon characterized not merely by teacher shortages but by the declining attractiveness, sustainability, and professional status of teaching itself. Addressing this challenge requires integrated reforms encompassing teacher education, workforce forecasting, recruitment, professional development, retention, and institutional governance.

3. Teacher Shortages, Workforce Planning, and the Decline of Teacher Education in India

A. Teacher Shortages in India: Magnitude and Emerging Trends

Teacher shortages have become one of the most pressing educational challenges confronting India in the twenty-first century. Despite remarkable progress in educational access, institutional expansion, and increasing enrolment at all levels of education, the availability of professionally qualified teachers has not kept pace with the growing demand.



Graph 1: Conceptual comparison of teacher shortages across different educational levels.

Conceptual comparison highlighting where shortages are generally reported in the literature. My conceptual synthesis based on literature.

estimates that millions of additional teachers will be required globally by 2030 to achieve Sustainable Development Goal 4 (Quality Education), with developing countries experiencing the greatest shortages [3]. India, despite having one of the largest educational systems in the world, continues to face substantial shortages of qualified teachers in elementary, secondary, and higher education institutions [2], [4].

The teacher shortage in India is multidimensional. It includes not only vacant teaching positions but also shortages of subject-specialist teachers, regional imbalances in teacher deployment, increasing dependence on contractual appointments, and inadequate numbers of professionally trained educators. UDISE+ reports indicate that although the overall pupil–teacher ratio has improved over the years, many government schools—particularly in rural, tribal, and economically disadvantaged regions—continue to function with insufficient teachers or without specialists in Mathematics, Science, English, and Computer Science [4]. Such shortages directly affect curriculum implementation, classroom instruction, student learning outcomes, and educational equity.

The shortage is even more pronounced in secondary education. Unlike elementary schools, where a single teacher may teach multiple subjects, secondary schools require specialized teachers for individual disciplines. The absence of qualified subject teachers frequently results in teachers handling subjects beyond their area of expertise, reduced instructional quality, and lower student achievement in national and state-level assessments [2], [7]. Similar shortages are increasingly reported in colleges and universities, particularly in science, engineering, teacher education, and interdisciplinary programmes,

where vacant faculty positions constrain teaching quality, research productivity, and innovation [8].

B. Teacher Workforce Planning: A Policy Perspective

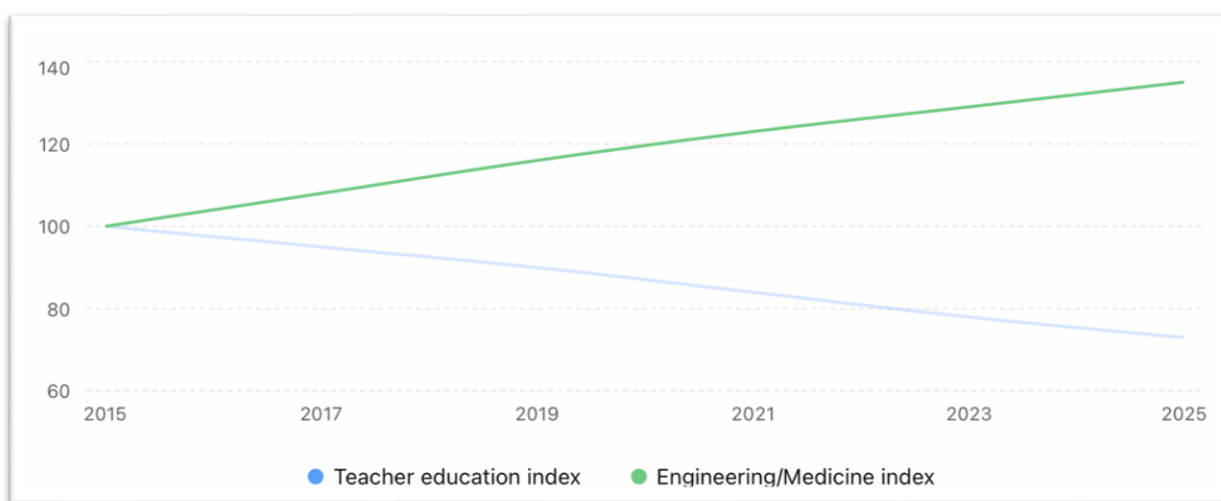
Teacher shortages cannot be understood merely as a numerical deficit; they represent a broader workforce planning challenge. Effective workforce planning requires governments to estimate future teacher demand by considering demographic trends, school enrolment, retirement patterns, curriculum reforms, subject specialization, regional disparities, and educational expansion. Countries with high-performing education systems integrate teacher education, recruitment, deployment, professional development, and retirement planning into a comprehensive workforce strategy [11], [12].

India's workforce planning has often been reactive rather than strategic. Teacher recruitment is frequently delayed because of administrative procedures, litigation, budgetary constraints, and irregular recruitment examinations. Consequently, many sanctioned posts remain vacant for prolonged periods, increasing workloads for existing teachers and reducing instructional effectiveness [4], [17]. Simultaneously, several teacher education institutions continue producing graduates without adequate alignment to state-specific employment requirements, leading to both unemployment among teacher graduates and shortages in schools requiring specialized teachers.

Recent educational reforms under the National Education Policy (2020) acknowledge these concerns and recommend transparent recruitment systems, merit-based appointments, integrated teacher education programmes, and continuous professional development [1]. However, successful implementation requires better coordination among universities, teacher education institutions, state governments, regulatory agencies, and school management systems.

C. Declining Enrolment in Teacher Education Programmes

One of the most significant indicators of the emerging "Vanishing Teachers" phenomenon is the declining attractiveness of teacher education programmes. Although India has experienced



Graph 2: Conceptual illustration showing the divergence between teacher education and other professional programmes. My conceptual synthesis based on literature.

unprecedented growth in engineering, medicine, management, and technology education during the past three decades, enrolment in teacher education has stagnated or declined in several states [6], [8].

Multiple factors contribute to this decline. First, changing career aspirations encourage talented students to pursue professions perceived as offering higher salaries, greater social prestige, international mobility, and better career advancement opportunities. Second, prolonged delays in teacher recruitment reduce confidence among graduates considering teaching careers. Third, commercialization of teacher education institutions has affected public perceptions regarding programme quality and employability. Finally, contractual employment, increasing administrative responsibilities, and comparatively lower remuneration have weakened the attractiveness of teaching as a lifelong profession [21], [22], [41].

This trend has important implications for the future educational workforce. Declining admissions today may translate into severe shortages of qualified teachers during the coming decade as experienced teachers retire and educational demand continues to expand. Therefore, revitalizing teacher education requires improving institutional quality, strengthening professional identity, modernizing curricula, enhancing practical training, and providing attractive career pathways for future teachers.

Factor	Impact on Teacher Supply	Educational Consequence
Declining social prestige	Fewer talented students choose teaching	Reduced quality of entrants
Lower salary compared with other professions	Career shift toward engineering, medicine, IT, and management	Teacher shortages
Delayed recruitment	Graduate uncertainty and unemployment	Vacant teaching positions
Contractual appointments	Reduced job security and motivation	Higher attrition
Commercialization of teacher education	Declining confidence in programme quality	Reduced enrolment
Limited career advancement	Lower professional satisfaction	Poor retention
Administrative workload	Teacher stress and burnout	Reduced instructional effectiveness
Uneven regional deployment	Urban concentration of teachers	Rural and tribal shortages

Table 2. Major Factors Contributing to the Decline of the Teaching Profession in India

Source: Compiled from References [1]–[8], [17], [21], [22], [41], [42].

D. International Comparison: Lessons for India

International experience demonstrates that teacher shortages can be addressed through sustained investment in teacher education and professional development. Finland recruits only academically outstanding candidates into teacher education programmes and requires all teachers to possess research-based master's degrees before entering the profession [37]. Teachers enjoy considerable professional autonomy, high public trust, and opportunities for continuous research and innovation.

Country	Entry Qualification	Salary	Social Status	Teacher Shortage
Finland	Master's	High	High	Low
Singapore	Bachelor's + NIE	High	High	Low
Japan	Bachelor's	High	High	Moderate
South Korea	Bachelor's	High	High	Low
India	B.Ed	Moderate	Declining	High

Table 3. Comparative Analysis of Teacher Recruitment, Professional Status, and Workforce Shortages in Selected High-Performing Education Systems

Source: Compiled from References [1]–[3], [11], [12], [15], [16], [35], and [37].

Singapore has developed a comprehensive teacher development system in which recruitment, training, mentoring, leadership development, and career progression are integrated within a single national framework. Teachers receive continuous professional learning opportunities and are supported through structured mentoring and performance development systems [35].

Japan emphasizes collaborative professional learning through **Lesson Study**, enabling teachers to improve instructional practices continuously. Professional collaboration rather than individual competition characterizes Japanese schools, contributing significantly to instructional quality [16].

South Korea similarly maintains high academic standards for teacher recruitment and provides competitive salaries, strong public recognition, and continuous professional development opportunities. OECD studies consistently identify these countries as examples where educational excellence results from sustained investment in teachers rather than curriculum reforms alone [11], [12].

These international experiences suggest that improving India's teacher workforce requires more than increasing recruitment. It requires restoring the professional status of teachers, strengthening teacher education institutions, modernizing curricula, ensuring transparent recruitment, improving salaries and career advancement opportunities, promoting research-based teacher preparation, and establishing long-term workforce planning mechanisms.

The evidence presented here demonstrates that India's teacher shortage is not simply a consequence of insufficient teacher education institutions but rather a complex interaction of educational policy, labour-market dynamics, institutional quality, workforce planning, professional motivation, and societal perceptions. The rapid expansion of engineering, medicine, management, and technology education has altered career aspirations among young graduates, while teaching has gradually lost its traditional position as a preferred profession. Unless these structural challenges are addressed through comprehensive policy reforms, India risks entering a prolonged period of teacher scarcity, particularly in secondary education and higher education institutions.

The concept of "Vanishing Teachers" proposed in this study therefore extends beyond numerical shortages. It represents the gradual erosion of the teaching profession as an attractive, respected, and sustainable career. Reversing this trend requires integrated reforms

that combine high-quality teacher education, efficient workforce planning, competitive professional incentives, and evidence-based educational governance.

4. Policy Recommendations, Future Directions, and Conclusion

A. Policy Recommendations

The findings of this study indicate that India's emerging teacher shortage is not merely a consequence of inadequate teacher supply but rather the result of interconnected structural, institutional, economic, and policy-related factors. Therefore, addressing the "Vanishing Teachers" phenomenon requires comprehensive reforms extending beyond conventional recruitment exercises. The following policy recommendations are proposed.

1. Establish a National Teacher Workforce Planning Authority

India requires a centralized teacher workforce forecasting mechanism that integrates demographic trends, school enrolment projections, retirement patterns, subject-wise demand, and state-level recruitment needs. Such an authority should coordinate with the Ministry of Education, NCTE, UGC, NCERT, State Education Departments, and universities to prepare five-year and ten-year teacher demand projections [1], [3], [4].

2. Modernize Teacher Education Programmes

Teacher education curricula should be redesigned to prepare teachers for competency-based education, digital pedagogy, artificial intelligence, inclusive education, multidisciplinary learning, and twenty-first-century skills. Greater emphasis should be placed on practical school internships, classroom research, action research, and technology-enabled teaching [1], [5], [41].

3. Restore the Professional Prestige of Teaching

Teaching should once again become one of India's most respected professions. This requires competitive salaries, performance-based career progression, research opportunities, leadership pathways, and national recognition for outstanding teachers. Public campaigns highlighting the societal contribution of teachers can improve the profession's image and attract talented graduates [3], [15], [32].

4. Introduce Merit-Based Recruitment with Time-Bound Appointments

Teacher recruitment should become transparent, technology-driven, and completed within predetermined timelines. Vacancies should not remain unfilled for extended periods, as delays discourage qualified graduates from entering the profession [4], [6].

5. Strengthen Subject-Specialist Teacher Recruitment

States should prioritize recruitment of teachers in Mathematics, Science, English, Computer Science, and regional languages where shortages are most acute. Workforce planning should be based upon district-wise and subject-wise projections rather than generalized vacancy estimates [4], [7].

6. Improve Teacher Retention

Teacher retention strategies should include mentoring programmes, reduced administrative workload, opportunities for continuous professional development, mental health

support, and structured career advancement. Research consistently demonstrates that professional satisfaction significantly influences teacher retention [14]–[16].

7. Revitalize Teacher Education Institutions

Teacher education institutions should undergo periodic quality assessment based on graduate employability, teaching quality, research productivity, school partnerships, and accreditation standards. Institutions consistently failing to meet quality benchmarks should be restructured or merged [5], [6], [30].

8. Promote Research-Based Teacher Education

Every B.Ed. and M.Ed. programme should include classroom research, action research, educational innovation, and evidence-based instructional practices. Stronger collaboration between universities and schools can improve teacher preparedness and encourage lifelong professional learning [34], [37].

9. Address Faculty Shortages in Higher Education

Universities and colleges should implement regular recruitment cycles, reduce dependence on contractual appointments, strengthen doctoral research, and provide attractive academic career pathways to ensure a sustainable supply of qualified faculty members [8], [17].

10. Develop a National Teacher Professional Development Framework

Continuous Professional Development (CPD) should become mandatory and linked with promotions, certifications, and leadership opportunities. Digital learning platforms, blended training models, and peer-learning communities can facilitate lifelong learning among teachers [1], [5], [11].

Challenge	Proposed Intervention	Expected Outcome
Declining enrolment in teacher education	Scholarships, integrated B.Ed., career awareness	Increased admissions
Teacher shortages	Annual workforce planning and recruitment	Reduced vacancies
Subject-specialist scarcity	District-wise subject forecasting	Better curriculum delivery
Teacher attrition	Career progression, incentives, mentoring	Improved retention
Faculty shortages	Regular university recruitment	Stronger higher education
Low professional status	Competitive salaries and national recognition	Enhanced prestige
Weak teacher preparation	Curriculum modernization and research-based training	Better teacher quality
Regional disparities	Rational deployment and incentive-based rural postings	Balanced teacher distribution

Table 4. Proposed Policy Framework for Addressing the "Vanishing Teachers" Crisis

Source: Developed by the author based on References [1]–[43].

B. Future of Teacher Education: Vision India 2047

As India aspires to become a developed nation by 2047, the role of teachers will become increasingly significant. The future teacher will no longer function solely as a classroom instructor but as a facilitator, mentor, researcher, innovator, technology integrator, and lifelong learner. Emerging technologies such as artificial intelligence, adaptive learning systems, virtual laboratories, and data-driven educational platforms will transform classroom practices; however, they cannot replace the human dimensions of teaching, including empathy, ethical reasoning, creativity, mentorship, and socio-emotional support.

Teacher education must therefore evolve from traditional content transmission towards competency-based professional preparation emphasizing critical thinking, interdisciplinary learning, educational technology, inclusive education, sustainability, global citizenship, and research literacy. Universities should establish Centres of Excellence in Teacher Education that integrate research, innovation, policy analysis, and school partnerships. Continuous professional development should become an integral part of teachers' professional identity rather than an occasional administrative requirement.

India's demographic advantage presents both an opportunity and a challenge. Unless sufficient numbers of highly competent teachers are prepared during the coming decade, the country may face an educational workforce deficit capable of affecting school education, higher education, research, innovation, and national productivity. Therefore, teacher education must become a strategic national investment comparable to investments made in engineering, medicine, and technology education.

C. Implications of the Study

The present study has implications for educational policymakers, teacher education institutions, universities, researchers, and government agencies. For policymakers, the findings highlight the importance of integrating teacher education, workforce planning, recruitment, and retention into a unified national strategy. For universities and teacher education institutions, the study emphasizes curriculum modernization, quality assurance, and stronger school–university partnerships. Researchers may utilize the conceptual framework of "Vanishing Teachers" to investigate regional disparities, teacher motivation, educational labour markets, artificial intelligence in education, and long-term workforce forecasting. Finally, the study contributes to the growing body of literature by synthesizing historical, policy, institutional, and international perspectives within a single analytical framework.

D. Limitations of the Study

This study is primarily based on secondary data obtained from government reports, international organizations, policy documents, and published scholarly literature. Although these sources provide comprehensive national and international perspectives, they may not fully capture state-specific variations or institution-level realities. Furthermore, the study adopts a qualitative and policy-oriented approach rather than empirical field investigation. Future studies should incorporate large-scale surveys, interviews with teachers and policymakers, longitudinal analyses of teacher education enrolment, and predictive modelling to generate more robust evidence regarding teacher workforce dynamics in India.

E. Scope for Future Research

The present study provides a comprehensive understanding of the emerging phenomenon of "Vanishing Teachers" in India; however, several areas warrant further investigation. Future research may focus on developing state-wise teacher workforce forecasting models using predictive analytics to estimate future teacher demand and supply across different educational levels. Empirical studies examining the impact of artificial intelligence, digital technologies, and educational automation on teacher demand and professional roles would also contribute significantly to the evolving discourse. Comparative analyses between public and private teacher education institutions may provide valuable insights into institutional quality, graduate employability, and teacher preparedness. Further investigations may explore teacher migration between government and private schools, regional disparities in teacher distribution, and the socio-economic factors influencing teacher motivation and retention. Additional research on the gender dimensions of teacher shortages, the economics of teacher education, graduate employability, and shortages of subject-specialist teachers in STEM disciplines would strengthen educational workforce planning. Comparative international studies benchmarking Indian teacher education curricula against high-performing education systems such as Finland, Singapore, Japan, and South Korea may offer evidence-based strategies for reform. Finally, future studies should examine the role of teacher education in achieving *India's Vision 2047*, with particular emphasis on developing a sustainable, technology-enabled, research-oriented, and globally competitive teaching workforce capable of supporting the country's long-term educational and socio-economic development.

5. Conclusion

Teachers remain the most valuable human resource within any educational system, and the long-term success of educational reforms depends fundamentally upon their quality, availability, motivation, and professional commitment. This study demonstrates that India is witnessing the emergence of a multidimensional "Vanishing Teachers" phenomenon characterized by declining enrolment in teacher education programmes, shortages of qualified subject-specialist teachers, increasing faculty vacancies in higher education, workforce planning deficiencies, declining professional attractiveness, and growing competition from alternative careers.

The historical analysis reveals that since Independence, successive commissions and national policies have consistently recognized teachers as the foundation of educational development. Nevertheless, despite substantial policy initiatives, implementation gaps, commercialization of teacher education, irregular recruitment, and changing socio-economic aspirations have weakened the teaching profession. International comparisons further indicate that countries with the highest-performing education systems consistently invest in rigorous teacher preparation, professional autonomy, continuous development, and strong social recognition of teachers.

The study argues that India's challenge is not merely a shortage of teachers but the gradual erosion of teaching as a preferred profession. Addressing this crisis requires a comprehensive national strategy encompassing teacher workforce planning, modernization of teacher education, timely recruitment, professional incentives, research-based preparation, institutional accountability, and continuous professional development. Revitalizing the teaching profession is therefore essential not only for improving educational quality but also for strengthening human capital, fostering innovation, promoting social equity, and realizing India's aspiration of becoming a globally competitive knowledge society by 2047.

Ultimately, no educational reform, technological innovation, curriculum revision, or infrastructure investment can substitute for a competent, motivated, and professionally respected teacher. Reversing the "Vanishing Teachers" phenomenon should therefore become a national priority, ensuring that India's future classrooms continue to be led by educators capable of inspiring generations of learners and sustaining the nation's educational and developmental progress.

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