

Determinants of Quality of Education in K12 Government Schools in Delhi-NCR

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Abstract:

This study examines the key determinants influencing the quality of education in government high schools across Delhi–NCR. The research was conducted using a structured questionnaire administered to 500 students selected through stratified purposive sampling from five districts—Delhi, Ghaziabad, Noida, Faridabad, and Gurugram. The findings reveal that the most critical factors shaping educational quality are the effectiveness of knowledge and literacy skills imparted, adequacy of school infrastructure, and the promotion of societal and digital competencies among students. While Delhi schools exhibit relatively better infrastructure, neighboring regions demonstrate significant disparities, particularly in access to technology and modern learning resources. The analysis indicates that students increasingly value holistic learning experiences that integrate emotional intelligence, digital literacy, and innovative pedagogies alongside traditional academics. The study underscores that achieving excellence in government high schools requires a balanced policy focus on both tangible resources and intangible enablers—teacher capacity, student well-being, and equitable digital access. The paper concludes that an integrated, equity-driven approach—anchored in the principles of the National Education Policy (NEP) 2020 and programs such as Samagra Shiksha—can significantly enhance learning outcomes and reduce dropout rates. The research offers valuable insights for policymakers, educators, and administrators aiming to strengthen the delivery of quality education and foster inclusive, future-ready public schooling systems in India.

Keywords: Quality education, Delhi–NCR, government schools, infrastructure, societal skills, IT enablers, NEP 2020

1. Introduction

Achieving excellence in government high schools in the Delhi–NCR region requires a coordinated focus on pedagogy, people, infrastructure, and governance. Excellence is not merely high pass percentages; it is sustained learning gains, equitable retention, safe and inclusive school climates, and successful transitions to higher secondary or vocational pathways. This essay synthesizes the principal determinants that enable such outcomes in Delhi–NCR government high schools, grounding the argument in national policy guidance and empirical findings. A starting point is clear policy and standards. The National Education Policy (NEP) 2020 provides a contemporary framework that emphasizes teacher quality, holistic learning, continuous assessment, and accountability—each of which is essential for school-level excellence. The NEP's

emphasis on professional development, foundational learning, and broader learning outcomes offers a roadmap that state and city systems (including Delhi) can adapt to local needs. NEP, Government of India. (2020)

Teacher quality and continuous professional development are central. Numerous evaluations of school systems in India show that teacher subject knowledge, pedagogical skill, and the availability of sustained in-service training strongly predict student learning gains. Policies such as the NEP and subsequent national standards highlight continuous teacher training, career progression, and quality assurance of teacher-education institutes as levers to improve classroom practice. In practice, schools that invest in classroom-focused coaching, structured lesson observation with feedback, and communities of practice among teachers tend to show better instructional quality and higher student achievement. NCTE (2023)

Instructional leadership and school-level management form the second major determinant. Principals who set a vision for learning, monitor teaching through regular classroom visits, and organize data-driven teacher meetings create conditions for sustained improvement. Evidence from state-led reform efforts indicates that when leadership is trained and supported, improvements in curriculum implementation and teacher practice follow; conversely, weak or absentee leadership often results in uneven pedagogical practice and poor student outcomes. Effective leadership is particularly crucial in urban contexts like Delhi–NCR where schools must manage rapid student mobility and heterogeneous learning needs. Raveenthiranathan, et al. (2024).

A third determinant is the use of continuous assessment and data. Routine, low-stakes formative assessments help teachers identify learning gaps early and target remedial instruction. At the system level, indicators captured in UDISE+ and composite indices such as the Performance Grading Index (PGI) provide actionable measures of school performance across learning, infrastructure, equity, and governance domains. Schools that incorporate assessment data into monthly pedagogical planning and community reporting are better positioned to adapt interventions and allocate resources where they matter most. UDISE (2023-24)

Student health, nutrition, and socio-economic supports also have direct effects on learning and attendance. India's Mid-Day Meal (MDM) programme, for instance, has been linked to higher enrolment, improved attendance, and measurable improvements in learning—especially in reading—when exposure is sustained. In Delhi's urban environment, where many students come from low-income or migrant families, reliable school meals, health checks, and counselling services reduce barriers to learning and increase the effectiveness of instructional efforts Indian Express (2025).

Physical and digital infrastructure is the fourth determinant. Safe classrooms, gender-segregated toilets, potable water, functional libraries and science labs, and basic ICT access are preconditions for an enabling learning environment. UDISE+ analyses repeatedly show that infrastructure shortfalls (e.g., single-teacher schools, lack of toilets) correlate with lower learning outcomes and higher dropout rates. In Delhi–NCR, investments in sanitation, classroom repair, and community learning spaces can deliver immediate returns in attendance and student well-being. Education For All in India (2024) Equity and inclusion must be embedded into any conception of excellence. Government schools serve diverse populations including children from marginalized castes, recent migrants, and students with disabilities. Proactive measures—scholarships, language and remedial support, gender-sensitive facilities, and anti-bullying programs—ensure that gains are shared rather than concentrated among advantaged students. Evidence from urban slum contexts in Delhi shows that targeted community outreach and flexible enrolment systems help retain vulnerable learners (BNSK 2024).

Community and parental engagement are another indispensable determinant. Schools that cultivate active parent–teacher associations, regular community reporting on student progress, and volunteer programs create accountability and extend learning beyond school hours. In the Delhi–NCR context, local universities, NGOs and CSR initiatives provide additional mentoring, digital labs, and after-school programs that complement formal schooling and expose students to career pathways.

Good governance and resourcing close the loop. Transparent budget allocation, timely disbursal of grants, performance-linked incentives, and simple school-level Management Information Systems (MIS) reduce administrative friction and let educators concentrate on teaching and learning. Delhi's education department has deployed targeted interventions (for example, mentorship for low-performing schools) which exemplify the importance of responsive governance in addressing entrenched underperformance (Indian Express June 2025).

In totality, excellence in Delhi–NCR government high schools emerge from an interplay of high-quality teachers and leaders, strong formative assessment and data use, student supports (nutrition and health), adequate infrastructure, equity-minded practices, community engagement, and accountable governance. Policy frameworks like NEP 2020 and national datasets (UDISE+/PGI) provide both the standards and monitoring tools, but local adaptation—teacher coaching models, remedial classes for migrant students, and partnerships with local institutions—determines whether resources translate into learning gains. But having said that there is no clear evidence of factor that determine the academic excellence in Government schools in Delhi NCR. This study is an attempt to understand those factors.

2. Literature review

The Right to Education Act (RTE) 2009 has ensured a quantitative expansion of India's education system so that all eligible school-going students are brought within the formal education system at the elementary secondary and senior secondary level (Government of India, 2013). However, the quality of education received at the school level is just as significant as the number of years of education (Jain and Prasad, 2018). According to the majority of studies on Indian government schools, the quality of education provided by the government is subpar (Bhattacharjee, 2019; Kundu, 2019; Khatua, & Chaudhury, 2019). The middle and lower middle classes' migration to private provision serves as the foundation for this (Lall, 2013). Anecdotal evidence shows that even government schoolteachers often choose a private alternative for their children.

Early childhood education fosters a wide range of developmental abilities essential for school readiness, laying the groundwork for lifetime learning. In terms of school education, the years 2023–2025 have placed a greater emphasis on the integration of social-emotional learning, cognitive flexibility, language and literacy acquisition, and physical development. Core competency development is regarded as a key priority in both the business and education. Schools, universities, and other educational institutions are primarily responsible for helping students develop the necessary abilities at all educational levels (European Commission, 2018). As a result of the technological and digital explosion, educational frameworks are rethinking and restructuring competency to address digital expertise, inclusive pedagogy, and learning assurance.

In their research, Muzulon et al. (2025) offered instructors a multifaceted framework that integrates digital, social-emotional, and cognitive competencies to help students deal with the challenges of dynamic corporate environments. In contrast to Kronberger and Rihova (2025), who stressed the necessity of organizational alignment in competency development, Richter and Kjellgren (2025) placed a strong emphasis on the value of adaptability and social intelligence in training teachers because they will be interacting directly with students on a daily basis. A global framework for skills that will be in demand in the future and that can be transferred from one occupation to another has been developed by international organizations including the UNICEF Global Framework on Transferable Skills and the OECD Learning Compass 2030.

According to a McKinsey Global Institute report from 2021, the workforce of the future will need a set of 56 fundamental skills that are linked to better employment, pay, and job satisfaction. These abilities were separated into four major skill categories: self-leadership, digital, interpersonal, and cognitive. In summary, there are 56 DELTAS in four categories and 13 skill groups. Since these are a combination of skills and attitudes, they are referred to as DELTAs rather than skills. The DELTA framework is merely an effort to specify the collection of competencies that governments, organizations, educators, and students can start with.

Additionally, there may be a variety of viewpoints that can be applied at various stages of the learning process.

But the cultural background also has a big impact on how people learn. Fostering meaningful and equitable learning outcomes requires tailoring learning techniques that prioritize abilities and skills to the distinct social, cultural, and educational settings of each site. In 2022, Magrin et al. In order to engage diverse learners, recent research emphasize the importance of culturally responsive pedagogies and self-regulated learning frameworks (Anyichie et al., 2023). They also emphasize the necessity of curricular designs that take into account local realities while preparing students for global concerns. (Center for Global Challenges, 2023; OECD, 2025)

The abilities and competences that high school students need to be able to navigate the challenging business environment of the future have been the focus of research over the past 10 years. While academic proficiency is important, having 21st century abilities is equally necessary to stay competitive. Information and communication technologies (ICTs) must be integrated to support the development of 21st century skills (Angrisani et al., 2018). This is because the modern world will be a combination of skill, creativity, and innovation (Gaol, Napitupulu, Soeparno, Trisetyarso, et al., 2018).

Giving kids lots of opportunities and exposure throughout their Basic Education years is therefore essential because it lays the groundwork for them to acquire the necessary skill sets and competences needed for success in both professional interactions and higher education. The importance of knowledge, skills, and support networks for students' success is emphasized in the P21 Framework for 21st Century Learning. In addition to subjective proficiency in English, reading, mathematics, geography, science, and history, the model stresses the importance of global awareness, financial literacy, entrepreneurship skills, business, health, and environmental literacy. However, for long-term personal and professional growth, learning and innovation skills, information media and technology skills, and life and career skills are equally crucial.

Thus, this approach offers a broader view of the competency that students must possess rather than limiting itself to what can be measured. In new types of educational assessment, the adage "what gets measured gets treasured" is still relevant. A growing number of competency frameworks today acknowledge the importance of complex, context-dependent traits like empathy, ethical reasoning, and adaptability—qualities that are crucial but difficult for standardized instruments to measure (CIPD, 2024; DevSkiller, 2025). Instead than only tracking performance, these frameworks seek to foster holistic development by embracing both quantitative and immeasurable characteristics.

2.2 Literature on Important factors

Improving learning outcomes in Indian government (public) secondary schools requires attention to both physical resources and softer, process-based enablers: school infrastructure, curriculum and teacher knowledge/skills, students' social-emotional skills, and information-technology (IT)

enablers. Researchers increasingly treat these elements as interacting inputs rather than isolated factors: poor infrastructure undermines gains from quality teaching; lack of socio-emotional skill development reduces classroom engagement; and digital tools can amplify good practice — but only where access and teacher capacity exist. The following review synthesizes empirical and policy literature on each domain with emphasis on Indian evidence where available.

Physical infrastructure (classrooms, toilets, drinking water, electricity, libraries, labs, and safe buildings) is one of the most consistently cited determinants of student learning. Cross-country reviews identify links between good infrastructure and improved attendance, concentration and achievement, while poor infrastructure is associated with absenteeism, health problems and teacher shortages. Barrett et al.'s review synthesizes global evidence showing consistent positive associations between multiple infrastructure elements and learning outcomes; the review also highlights heterogeneity — not every infrastructure input yields the same impact, and context/quality matters (Lombo et al, 2024).

India-specific evaluations corroborate these patterns. Regional and NGO evaluations (e.g., Empathy Foundation / program assessments) and multiple smaller studies report that investments in classroom repairs, sanitation, and science/lab facilities improve enrolment and school retention and create conditions more conducive to effective teaching and learning. However, many government schools continue to report chronic deficits in essential facilities, which disproportionately affect girls (toilets, water) and rural/remote schools (Barrett, P. (2019)).

Teacher subject-knowledge, pedagogical skill, and school-level knowledge management significantly influence secondary-level learning. Studies of knowledge management systems in Indian public schools show positive relationships between structured teacher collaboration, access to curriculum resources, and student achievement — particularly where schools adopt systematic lesson planning and assessment practices (Valacherry & Pakkeerappa, 2021)

At the same time, large national assessments and state-level studies repeatedly find gaps in teacher subject-knowledge (especially in mathematics and science) and in the use of formative assessment to guide instruction. Teacher shortages and mis deployment (e.g., non-subject specialists posted in secondary sections) further weaken content delivery, affecting learning continuity and examination outcomes. Recent reporting on state assessments underlines how shortages & deployment issues affect coverage and quality(Times of India 2025). Therefore, strengthening teacher pre-service and in-service training, establishing school-level knowledge processes (peer observation, lesson study), and ensuring subject-appropriate deployment are high-impact strategies when combined with curriculum and assessment reforms.

Social and emotional competencies communication, cooperation, self-management, resilience, and problem-solving are increasingly recognized as key predictors of classroom behaviour, engagement, and longer-term educational trajectories. Indian studies of school-based life-skills or SEL programs (Second Step, RULER, and Responsive Classroom) show improvements in socio-emotional functioning, classroom conduct and coping strategies among adolescents, with

implications for attendance and persistence through secondary grades. Large point estimates vary by program design and fidelity, but the general trend is positive (Surendran et. al 2024).

National diagnostic efforts (e.g., the first nation-level CASS assessment) and commentary have flagged a country-wide deficit in SEL emphasis within both government and private schools — with limited systematic integration into curricula and teacher practice. The lack of sustained emphasis on affective learning domains can reduce students' readiness to benefit from cognitive instruction and inhibit the development of 21st-century employability skills (NHSJS 2024). Incorporating SEL/life-skills into curricular standards, teacher training, and classroom assessment is important for improving engagement, especially among adolescents facing socioeconomic stressors common in government-school populations. India's national digital initiatives (notably **DIKSHA**, NCERT's national digital platform) and a host of state and NGO digital programs aim to expand access to curriculum resources, teacher training modules, and assessment tools. UNESCO and government documentation position **DIKSHA** as a core infrastructure for digital content and teacher professional learning (UNESCO 2024.)

Empirical studies of digital learning in India show mixed results. Well-designed digital interventions can supplement instruction, provide remedial practice, and standardize quality content; however, impacts depend heavily on device access, reliable connectivity, teacher integration of digital content, and learners' home environment. During COVID-era remote learning, many students in economically disadvantaged households lost access to effective instruction because of the digital divide — surveys showed large fractions of children without smartphones or internet access, limiting reach of ed-tech solutions (Sharma and Bhagat 2022). IT enablers have high potential as scale instruments but require parallel investments in hardware, connectivity, teacher capacity, and content localization. Without such supports, digital platforms risk widening existing inequities.

From the above discussion it can be deduced that while evidence in the domain is growing there are some important gaps in Indian context. For instance, rigorous causal studies linking specific infrastructure improvements to learning at secondary level are limited. Secondly, scalable models for integrating SEL into standard curricula in government schools are still experimental but their results are yet to be tested. Similarly, long-term follow-ups of digital interventions to assess learning persistence and equity impacts are also sparse. The study is an attempt to understand the determinants of Quality of Education in K12 Government Schools in Delhi-NCR

3. Research method

The data for the study were collected from high school students in Delhi NCR using a stratified purposive sampling technique. The region was divided into five regions, namely Delhi, Ghaziabad, Noida, Faridabad and Gurugram. From all the school's 500 students were selected for the study. Out of the given respondents, 57 percent were male students while the remaining

43 % were female. The faculty respondents consisted of 76% females, and the remaining were males. The average age of student respondents was 14.2 years.

4. Analysis

The analysis of the paper comprises of the pie charts that have been developed by the researcher after critically collecting data from the students of government high schools located in Delhi -NCR. The school samples were carefully selected by keeping into mind all the different areas of Delhi NCR based on location, kind of students coming etc. The respondents were first briefed about the academic significance of the research and on their consent the data was collected from them. Later after checking the validity of the data, the data was critically analyzed using pie chart diagrams. Based on the same the conclusions of the study were drawn. The researcher considered nine important parameters for high school dropouts like school infrastructure, knowledge skills, societal skills, financial responsibility, innovative learning, literacy skills, overall school environment and teaching pedagogy. The following were the responses of the high school students.

4.1 School Infrastructure

School infrastructure is very important element when considering academic excellence. The results of the study suggests that 60 percent of the school students say that school infrastructure is very important for continuing school and only 8 % feel that there is not much relevance of good infrastructure. They opined that curriculum and teaching pedagogy is more important as compared to infrastructure. Unexpectedly 20 percent of the students have a neutral stance on the school infrastructure. The pie chart showing School Infrastructure preference of the school students are given below in Fig 1.

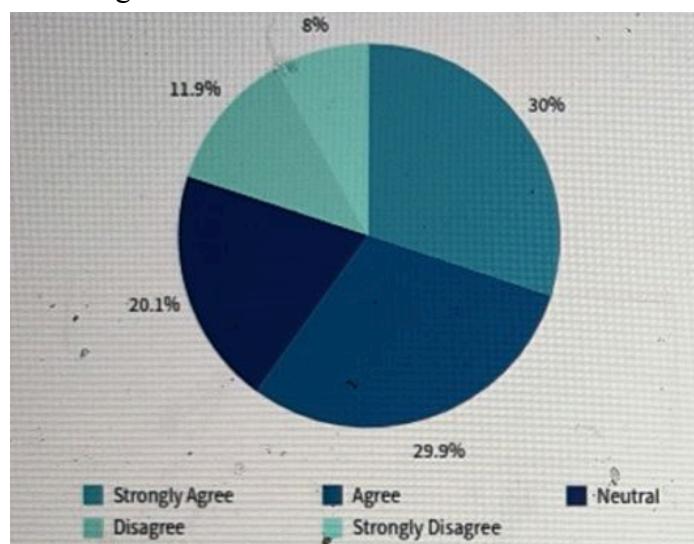


Fig 1: School Infrastructure

4.2 Knowledge skills

Many respondents while answering the questionnaire responded that knowledge skills imparted by the government school should be good. All though the syllabus followed by the school is similar to the private counterparts but the delivery is toned down. 65 percent of the students believe that knowledge skills are very important for the students and reasons of academic excellence the school. They belief that it is a wastage of time if they only learn basics and will fail in different walks of life if they lack the knowledge skills. About 20 percent of the students feel that knowledge skills are insignificant. The pie chart showing knowledge skill preference of the school students are given below in Fig 2.

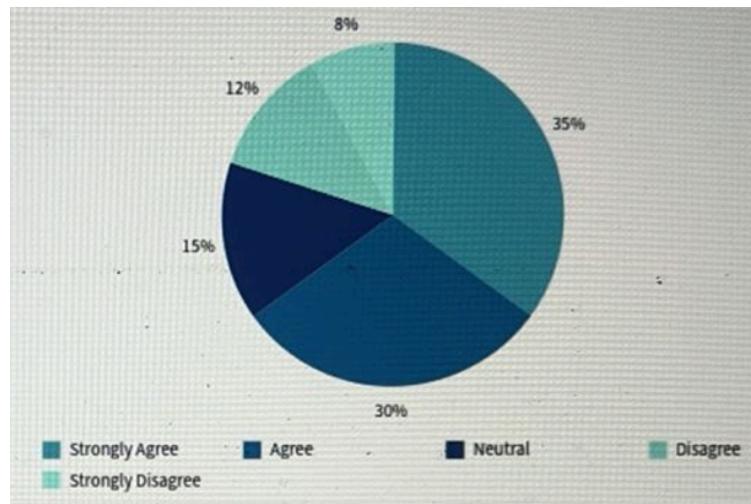


Fig 2: Knowledge skills

4.3 Societal Skills

The public high school goers significantly believe that education today is not limited to imparting academic knowledge; it also focuses on shaping students into responsible citizens. Societal skills such as empathy, teamwork, ethical reasoning, conflict resolution, and civic responsibility help learners grow into well-rounded individuals. These skills prepare students to balance personal goals with societal welfare. About 60% of the students believe that societal skills are very important where as 20 percent of them believe that there is no significant relevance of societal skills. Only 8 percent feel that societal skills are irrelevant. The pie chart showing societal skill preference of the school students are given below in Fig 3

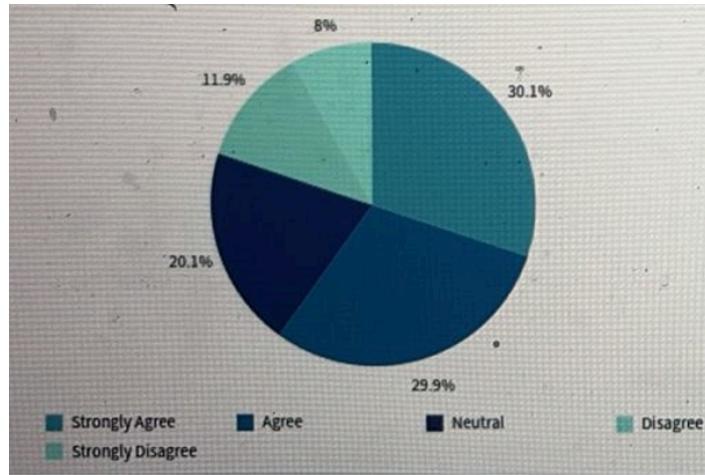


Fig 3: Societal Skills

4.4 IT Enablers

IT enablers such as digital libraries, online learning platforms, and open educational resources (OER) break geographical barriers and provide access to high-quality knowledge. Students from remote or underserved areas can access the same materials as those in urban centers, thereby promoting equity in education. Technology has transformed traditional teaching into interactive and engaging experiences. Tools like smart classrooms, simulations, AI-driven tutoring, and learning management systems (LMS) make learning more personalized, adaptive, and student-centered. Teachers can use data analytics to track student progress and adjust teaching strategies. 55 percent of Delhi High school student believe that IT enablers are very important while whooping 25 percent believe that they are indifferent to this factor. Maybe they undermine the power of technology. About 22 percent feel the significance of IT enablers very low. The pie chart showing IT enablers preference of the school students are given below in Fig 4.

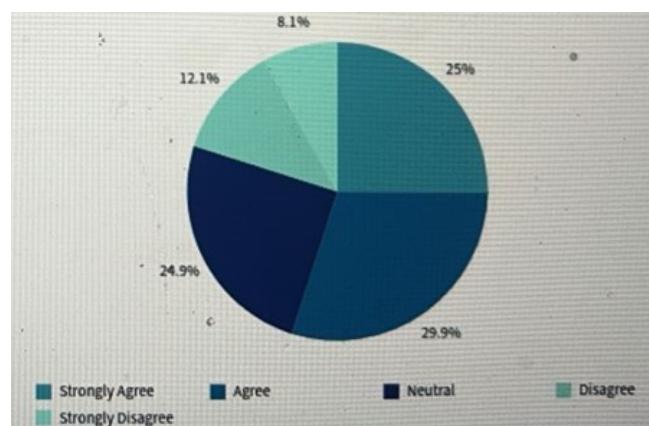


Fig 4: IT Enablers

4.5 Innovative Learning

Innovative learning refers to the adoption of new teaching methods, tools, and approaches that go beyond traditional rote learning to enhance creativity, problem-solving, and critical thinking among students. It integrates technology, experiential learning, collaborative methods, and learner-centered practices. Innovative strategies such as gamification, project-based learning, and interactive digital platforms make the learning process more engaging. Students participate actively, which improves attention span and motivation. Unlike, memorization-based systems, innovative learning emphasizes inquiry, exploration, and application of knowledge in real-life contexts. This prepares students to tackle complex problems creatively. 35 percent of the students strongly believe and about 25 percent of the respondent believe that innovative learning is very important to continue the high school education without which the school education is redundant. The pie chart showing Innovative learning preference of the school students are given below in Fig 5.

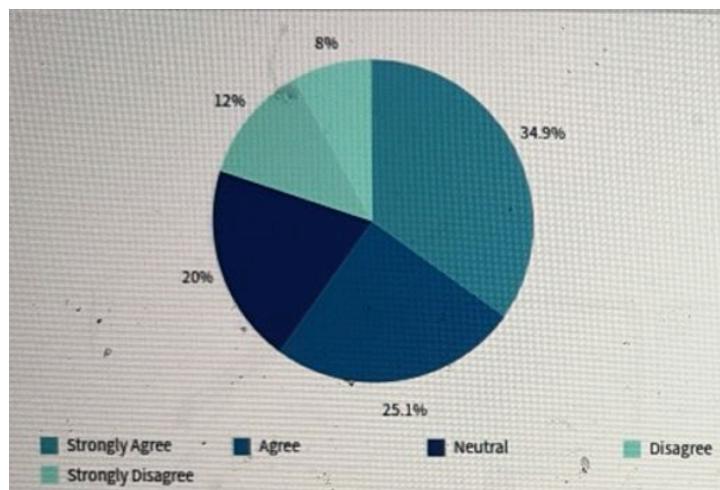


Fig 5: Innovative Learning

4.6 Literacy skill

Literacy skills like reading, writing, listening, and speaking—form the foundation of all learning and play a vital role in personal, social, and academic development. Literacy is the gateway to education. The ability to read and write enables students to access textbooks, classroom instructions, and digital resources, making it essential for progress in all subjects. Strong literacy skills help students comprehend complex concepts, communicate ideas effectively, and perform better in examinations and higher studies. The pie chart showing Literacy skill preference of the school students are given below in Fig 6

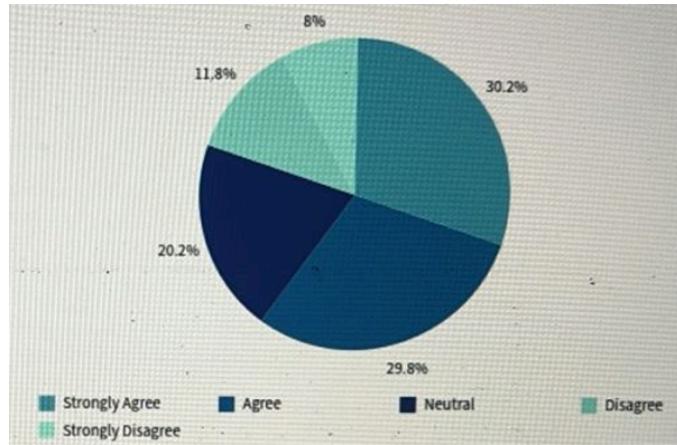


Fig 6: Literacy skill

4.7 Overall school environment

The overall school environment refers to the physical, social, emotional, and academic atmosphere in which students learn. It includes infrastructure, teacher-student relationships, peer interactions, safety, inclusivity, and the culture of the institution. A positive school environment plays a critical role in shaping student learning, growth, and future success. A well-structured, safe, and resourceful school environment enhances concentration and motivation, which directly improves student performance and academic outcomes. The pie chart showing overall school environment preference of the school students are given below in Fig 7

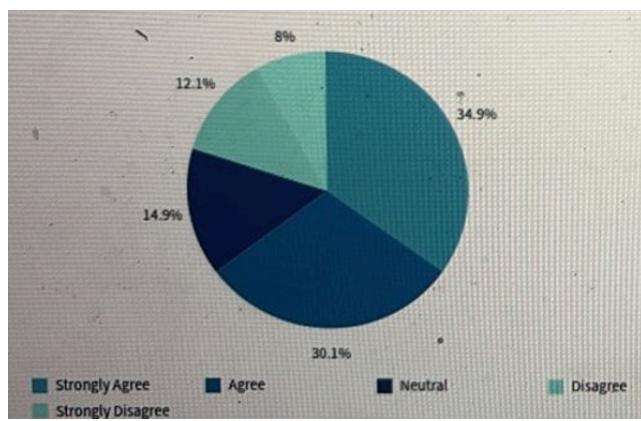


Fig 7: Overall school environment

4.8 Teaching pedagogy

Teaching pedagogy refers to the methods, strategies, and approaches that teachers use to facilitate learning. It is not just *what* is taught, but *how* it is taught that determines the effectiveness of education. Pedagogy shapes students' understanding, skills, values, and overall learning experience. Effective pedagogy helps students grasp concepts clearly, retain knowledge longer, and apply it meaningfully. It shifts education from rote memorization to deep understanding. The pie chart showing Teaching pedagogy preference of the school students are given below in Fig 8

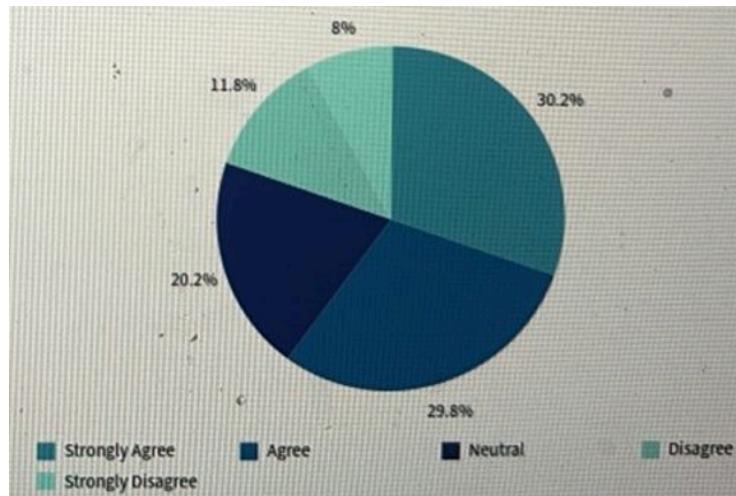


Fig 8: Teaching pedagogy

5 Policy recommendations

To strengthen educational outcomes in Indian government high schools, a multidimensional policy framework is essential i.e. the one that integrates infrastructure development, teacher knowledge enhancement, societal skills education, and IT-enabled learning. First, the government should prioritize comprehensive infrastructure upgrades through targeted funding and public-private partnerships. Beyond basic amenities such as classrooms, sanitation, and drinking water, emphasis should be placed on creating learning-conducive environments—including functional laboratories, libraries, and digital classrooms. Infrastructure policies must adopt an equity lens, ensuring that rural, remote, and girl-focused schools receive proportional resources to bridge existing gaps.

Second, policy must strengthen teacher knowledge and pedagogical capacity. This can be achieved by institutionalizing continuous professional development (CPD) programs aligned with the National Education Policy (NEP) 2020. Teachers should have access to structured mentoring, peer-learning communities, and digital content repositories via platforms like DIKSHA and NISHTHA. State education departments should conduct regular skill audits to ensure teachers are deployed in subjects matching their expertise, while introducing incentives for performance-linked professional growth.

Third, societal and life-skill education must be mainstreamed as a formal curricular component rather than as a peripheral activity. Schools should embed social-emotional learning (SEL) modules—focusing on empathy, communication, critical thinking, and civic values—within classroom practice. Partnerships with NGOs and mental health organizations can support capacity building for teachers to deliver SEL effectively, thereby fostering resilience and reducing dropout rates among adolescents from disadvantaged backgrounds. Finally, the government should invest strategically in IT enablers to democratize access to quality education. Policies must move beyond providing devices and connectivity, ensuring that digital platforms are localized, inclusive, and integrated into pedagogy. Teacher training in digital literacy, community-based digital resource centers, and low-bandwidth adaptive learning apps should be institutionalized to ensure continuity of learning even in low-resource settings. An integrated policy approach combining these four pillars—infrastructure, teacher knowledge, societal skills, and IT enablement—will create sustainable systemic transformation, enhancing both the quality and equity of education across India’s government high schools.

6 Conclusion

This study highlight that the quality of education in government high schools across Delhi–NCR is shaped by a complex interplay of structural, pedagogical, social, and technological factors. Among these, school infrastructure, knowledge and pedagogical skills, societal or and IT enablers emerge as the most influential determinants. The evidence from both literature and field data underscores that improvements in only one of these areas yield limited results; instead, sustainable excellence depends on simultaneous progress across all four domains.

The analysis of student responses reveals that most learners perceive infrastructure and knowledge skills as crucial to their educational continuity, but also recognize the growing importance of societal skills and digital literacy in preparing them for life beyond school. This reflects a gradual shift in student expectations—from viewing education solely as academic attainment to seeing it as holistic development. While Delhi’s schools show moderate strength in physical infrastructure, the study finds uneven quality in neighboring NCR districts, indicating the need for more balanced resource allocation and infrastructural parity.

At the pedagogical level, teachers’ professional competencies and their ability to integrate innovative and technology-supported learning remain vital to student engagement and achievement. Social and emotional learning, often neglected in traditional classrooms, must become a formalized component of schooling to nurture responsible, empathetic, and resilient citizens. Likewise, technology, when thoughtfully implemented, can bridge gaps in access and quality—yet it requires adequate digital infrastructure, teacher training, and inclusive design to ensure equitable impact.

Overall, the study concludes that the pursuit of excellence in Delhi–NCR government high schools must be holistic, equity-driven, and evidence-based. Policies focusing on integrated infrastructure development, teacher empowerment, SEL integration, and IT enablement can transform learning environments into inclusive spaces that foster academic success and personal growth. If implemented effectively under frameworks such as NEP 2020 and Samagra Shiksha, these measures can help government schools evolve into centres of innovation, resilience, and lifelong learning—ultimately advancing the broader national goal of quality education for all.

References

- Battin-Pearson, S., Newcomb, M. D., Abbott, R. D., Hill, K. G., Catalano, R. F., & Hawkins, J. D. (2000). Predictors of early high school dropout: A test of five theories. *Journal of educational psychology, 92*(3), 568.
- Blue, D., & Cook, J. E. (2004). High school dropouts: Can we reverse the stagnation in school graduation. *Study of High School Restructuring, 1*(2), 1-11.
- Chatterji, P., & DeSimone, J. (2005). Adolescent drinking and high school dropout.
- Christle, C. A., Jolivette, K., & Nelson, C. M. (2007). School characteristics related to high school dropout rates. *Remedial and Special education, 28*(6), 325-339.
- Dowrick, P. W. (2003). School drop-outs, adolescence. In *Encyclopedia of primary prevention and health promotion* (pp. 924-929). Springer, Boston, MA.
- Fall, A. M., & Roberts, G. (2012). High school dropouts: Interactions between social context, self-perceptions, school engagement, and student dropout. *Journal of adolescence, 35*(4), 787-798.
- Freudenberg, N., & Ruglis, J. (2007). Reframing school dropout as a public health issue. *Preventing chronic disease, 4*(4), A107.
- Fulford, S. (2014). Returns to Education in India. [Working paper]. ScienceDirect.
- Kumar, P. (2023). Determinants of school dropouts among adolescents. Indian Journal of Community Medicine (PMC). Retrieved from <https://pmc.ncbi.nlm.nih.gov/articles/PMC9980764/>
- Fulford, S. (2014). Returns to education in India. *World Development, 59*, 434-450.
- Gonzales, N. A., Dumka, L. E., Deardorff, J., Carter, S. J., & McCray, A. (2004). Preventing poor mental health and school dropout of Mexican American adolescents following the transition to junior high school. *Journal of Adolescent Research, 19*(1), 113-131.
- Ham, A., Adelman, M., Vazquez, E., & Haimovich, F. (2017) Predicting School Dropout with Administrative Data.https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=%E2%80%9CHam%2C+Andres%3B+Adelman%2C+Melissa%3B+Vazquez%2C+Emmanuel%3B+Haimovich%2C+Francisco.+2017.+Predicting+School+Dropout+with+Administrative

+Data%3A+New+Evidence+from+Guatemala+and+Honduras.+Policy+Research+Working+Paper%3BNo.+8142.+&btnG=

- Hawkins, R. L., Jaccard, J., & Needle, E. (2013). Nonacademic factors associated with dropping out of high school: Adolescent problem behaviors. *Journal of the society for social work and research*, 4(2), 58-75.
- Kishore, A. N., & Shaji, K. S. (2012). School dropouts: examining the space of reasons. *Indian Journal of Psychological Medicine*, 34(4), 318-323.
- Kokkinopoulou, E., Vrontis, D., & Thrassou, A. (2025). The impact of education on productivity and externalities of economic development and social welfare: a systematic literature review. *Central European Management Journal*.
- Kumar, A. (2021). New education policy (NEP) 2020: A roadmap for India 2.0. *University of South Florida (USF) M3 Publishing*, 3(2021), 36.
- Kumar, P., Patel, S. K., Debbarma, S., & Saggurti, N. (2023). Determinants of School dropouts among adolescents: Evidence from a longitudinal study in India. *PLoS one*, 18(3), e0282468.
- Garg, Mausam Kumar, Poulomi Chowdhury, and Illias Sheikh. "Determinants of school dropouts in India: a study through survival analysis approach." *Journal of Social and Economic Development* 26.1 (2024): 26-48.
- Adelman, M., Haimovich, F., Ham, A., & Vazquez, E. (2018). Predicting school dropout with administrative data: new evidence from Guatemala and Honduras. *Education Economics*, 26(4), 356-372.
- Mahalanabis, S., & Acharya, S. (2021). Socio-economic origins of school dropouts in rural India. *Indian Journal of Political Science and Law*, [Online]. Available: https://ijpsl.in/wp-content/uploads/2021/03/Socio-Economic-Origins-of-School-Dropouts-in-Rural-India_Sukanya-Mahalanabis-Sreejita-Acharya.pdf. [Accessed: Aug. 11, 2024].
- Patrinos, H. A. (2023). The longer students were out of school, the less they learned. In *COVID-19 and Schools* (pp. 106-120). Routledge.
- Lamb, S., & Markussen, E. (2010). School dropout and completion: An international perspective. In *School dropout and completion: International comparative studies in theory and policy* (pp. 1-18). Dordrecht: Springer Netherlands.
- Tsemato, B., Darza, D., & Berhanu, A. (2024). Student Dropout: The Case of Government Schools in South Ethiopia Region. *International Journal of Religion*, 5(6), 427-437.
- Latif, A., Choudhary, A. I., & Hammayun, A. A. (2015). Economic effects of student dropouts: A comparative study. *Journal of global economics*, 3(2), 1-4.
- Liem, J. H., Lustig, K., & Dillon, C. (2010). Depressive symptoms and life satisfaction among emerging adults: A comparison of high school dropouts and graduates. *Journal of adult development*, 17(1), 33-43.

- Maertens, A. (2013). Social norms and aspirations: age of marriage and education in rural India. *World Development*, 47, 1-15.
- McIntosh, K., Brigid Flannery, K., Sugai, G., Braun, D. H., & Cochrane, K. L. (2008). Relationships between academics and problem behavior in the transition from middle school to high school. *Journal of Positive Behavior Interventions*, 10(4), 243-255.
- Ministry of Statistics and Programme Implementation (MoSPI). Dropout rate by sex and level of school education. Government of India. Retrieved from MOSPI data tables.
- Minz, A. M., Jain, K., Soni, G. P., & Ekka, A. (2015). A study on assessment of scholastic dropout and its determinants in adolescents residing in Raipur city of Chhattisgarh state.
- Mitra, A. (2019). Returns to education in India: Capturing the heterogeneity. *Applied Economics*.
- Patrinos, H. A., et al. (2023). The longer students were out of school, the less they... World Bank.
- Prakash, R., Beattie, T., Javalkar, P., Bhattacharjee, P., Ramanaik, S., Thalinja, R., ... & Isac, S. (2017). Correlates of school dropout and absenteeism among adolescent girls from marginalized community in north Karnataka, south India. *Journal of adolescence*, 61, 64-76.
- ResearchGate / NSSO survival analysis study (2023). Determinants of school dropouts in India: survival analysis.
- Wong, C. (2024). Breaking the Chains of Intergenerational Childhood Poverty: A Narrative Retrospective Study of Resilience (Master's thesis, University of the Witwatersrand, Johannesburg (South Africa)).
- World bank education report <https://www.worldbank.org/en/topic/education/overview>