

# Gifted Education in India: Observations, Gaps, lessons Learned from Field Experiences and Institutional Visits

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## ABSTRACT

Gifted education in India is characterized by diverse philosophies and innovative practices, yet remains fragmented and uneven. Fieldwork across institutions revealed models such as holistic Panchakosh development, STEM-based experiential learning, project-based mentorship, and rural community-based approaches. While these initiatives demonstrate creativity, systemic gaps persist in identification, nurturance, inclusion of twice-exceptional and underprivileged learners, and balanced attention to arts and sports alongside scholastic giftedness. Teachers, though deeply committed, often lack structured pre-service training in gifted pedagogy, with most relying on short in-service workshops that provide limited impact. Addressing these challenges requires embedding gifted education into preservice teacher training programs, developing sustained professional pathways, and supporting enrichment structures such as clubs and circles. Strengthening these foundations will help India move toward a more coherent and inclusive framework for nurturing gifted and talented learners, in alignment with the vision of NEP 2020.

**Key Words:** Gifted education, NEP 2020, teacher training, identification, enrichment programs

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## INTRODUCTION

Gifted children are those with exceptional intellectual, creative, artistic, or leadership capacities who require differentiated educational opportunities beyond the general curriculum. NEP 2020 acknowledges this need, emphasizing enrichment and acceleration programs for students with gifts, interests and high potential. Gifted education in India is still at a formative stage. While national and state policies are yet to be formalized and dedicated funding is not available, important progress has nonetheless been made through the efforts of researchers, practitioners, and non-governmental organizations. As Paromita Roy (2017) observes, contributions have often been *sporadic and localized*, but they represent meaningful steps toward recognizing and nurturing gifted learners across diverse contexts. Even though a common national database does not exist to capture past and ongoing programs, many initiatives particularly those led by NGOs and private institutions have created opportunities for high-ability students. The thrust of these efforts has been to identify gifted learners, often through scholastic performance, and provide them with enrichment and acceleration opportunities, especially in science and mathematics. While programs in the arts, music, and sports remain fewer and often resource-constrained, they demonstrate a growing awareness that giftedness extends beyond academics. In India, research and development in the field of gifted education has historically been limited, largely because national priorities have focused on educating the masses and ensuring access for “average children.” As Roy (2017) and others have noted, attention has often centered on disadvantaged learners from low socioeconomic strata and minority populations, leaving gifted education underemphasized. Understandings of giftedness and talent vary widely across regions, shaped by unique sociocultural dynamics and learning opportunities (Maitra, 2006).

Despite these challenges, important efforts have been made. Gifted education in India has often been restricted to families who can afford specialized services, and the absence of a national database has made networking and advocacy difficult for parents of gifted children spread across the country (Roy & Kurup, 2016). Rural schools, in particular, face barriers in early identification due to limited infrastructure, variations in curricula and medium of instruction, and uneven teacher quality (Kurup & Maithreyi, 2011). Research highlights the absence of culturally validated tools. Jambunathan & Jayaraman (2011) proposed an Academic Competency Checklist, but adoption remains limited. Studies emphasize teacher specialization as critical for effective gifted education Subotnik, Olszewski-Kubilius, & Worrell, 2011). In India, most teachers lack formal training in gifted pedagogy. A few universities, such as Pune in collaboration with Jnana Prabodini offers a structured one-year PG Diploma course. Many teachers complete this course to work in the area of giftedness. However, it is not yet widely popular. Several NGOs have stepped in with certificate programs

ranging from two weeks to six months, but these are varied and non-standardized and most importantly heavily rely on the western models. India being a country with vast diversities, the teacher trainings should be rooted in Indian socio cultural and linguistic diversity.

The Right to Education Act (2009) marked a significant step toward inclusion by guaranteeing free education for all children up to 14 years of age. However, as Kurup & Maithreyi (2012) and Roy & Kurup (2016) argue, the emphasis has primarily been on disadvantaged groups, with gifted learners receiving scant attention. Advocates caution that underemphasizing the needs of gifted and talented children risks denying them the opportunity to realize their full potential. Equal schooling opportunities are essential, but provisions under the Act remain inadequate to meet the specific needs of gifted learners.

NTSE (National Talent Search Examination) scholarship by NCERT is one of India's most prestigious programs to identify academically gifted students in Class 9 and 10. Department of Science and Technology (DST) launched a program called INSPIRE which promotes science and technology activities. (Roy & Kurup, 2016). There are many programs like Olympiads, Talent Hunts, Hackathons which recognises talents and high abilities but they do not offer comprehensive gifted education program to the students. Moreover, these programs are event driven, scattered and do not address the needs of children with gifts and talents.

The National Education Policy (NEP) 2020 marks a significant shift by explicitly recognizing the importance of nurturing student talents. It emphasizes that every child has innate abilities which must be discovered, fostered, and developed. Teachers will be trained to identify and support such talents, with NCERT and NCTE developing guidelines for gifted education. Even B.Ed. programmes may offer specializations in this area. The policy also encourages supplementary enrichment opportunities for students with singular interests, through project-based clubs and circles such as Science, Math, Music, Drama, Debate, Sports, and Eco-Clubs. In addition, national residential summer programmes will be promoted to provide rigorous, merit-based yet equitable opportunities for secondary school students, including those from disadvantaged backgrounds.

Together, these provisions represent a welcoming change, signalling India's intent to move beyond a one-size-fits-all approach and create pathways for gifted and talented learners to realize their full potential. These provisions signal a shift from sporadic, localized efforts toward a more structured and inclusive vision, offering hope that gifted learners will gradually find space within India's broader educational agenda. Despite systemic gaps, the commitment of NGOs, educators, and advocates has ensured that gifted education in India continues to evolve, laying the foundation for a more inclusive and comprehensive framework in the future. This paper explores the current status of education programs for children with gifts and talents and high potential in India and outlines a way forward.

## METHODOLOGY

This study adopts a qualitative mixed-methods design, drawing on institutional visits, interviews, and document analysis to capture diverse perspectives on gifted education in India. First, a document analysis was conducted of the National Education Policy (NEP 2020) and related frameworks to understand the policy intent and gaps in implementation. Second, a review of scholarly literature was undertaken, drawing on both Indian and international studies to situate gifted education within broader educational discourse. Third, field visits were carried out to seven institutions across India that actively engage in nurturing gifted learners. These visits provided insights into identification practices, enrichment programs, infrastructure, and teacher training models. By triangulating these sources policy documents, academic literature, and institutional practices the paper ensures a comprehensive understanding of the current landscape.

### **Institutional Practices in Gifted Education**

As part of this study, field visits were conducted across seven institutions engaged in the nurturance of children with gifts and talents and are popular in the area of Nurturing gifted and talented students: Agastya International Foundation (Bengaluru), Cluster Innovation Centre (New Delhi), GEAR Innovative School (Bengaluru), Jnana Prabodhini Prashala (Pune), Kaveri Gifted Education and Research Center (Pune), MENSA (Delhi), and The Galaxy Education System (Rajkot). These institutions represent diverse models of gifted education, ranging from NGO-led initiatives to specialized schools and research centers.

A variety of pedagogical strategies were observed in these organisations, including enrichment programs, accelerated curricula, differentiated instruction, project-based learning, and level-based instruction. Such approaches reflect an emphasis on tailoring learning experiences to the unique capacities and interests of gifted students. All the institutions are focusing on moving beyond the general school curriculum to provide opportunities for deeper engagement and advanced exploration depending the interest of the students.

### Common Identification Practices

Although the gifted research started in early 1960s, a standardized tool for identification of gifted learners is absent. Most of the institutions have developed checklist and tools to suit the organisational needs. It is observed that the institutions rely on a combination of parent nominations and teacher nominations, which are consistently valued across organizations. In addition to the nominations, several psychometric and scholastic assessments are administered to screen and identify gifted students, which pre-dominantly includes test like:

- Intelligence and Aptitude Measurement for grades 10–12
- Unstandardised Non Verbal Performance tests
- Intelligence, Adjustment, and Personality Tests for grades 6–9
- Two-level entrance examinations for screening and identification
- Indian Child Intelligence Test (ICIT)
- Culture Fair Intelligence Test (CFIT)
- Domain-specific IQ tests
- Assessment of Scholastic Skills and Talents (ASSET)
- Student Mental Ability Test (SMAT)

These tools, while varied, collectively aim to capture cognitive ability, scholastic achievement, and domain-specific talent. However, the reliance on multiple instruments underscores the lack of a unified framework for gifted identification in India.

### Observed Trends

The findings suggest that gifted education in India is pluralistic and context-driven, with institutions innovating within their own philosophical orientations and resource constraints. While enrichment and acceleration are common strategies, the absence of standardized identification protocols highlights the need for national guidelines and teacher training to ensure equity and consistency. Importantly, the emphasis on parent and teacher nominations reflects the recognition of contextual knowledge in identifying giftedness, even as psychometric testing provides additional validation.

### Comparative Practices in Gifted Education (India)

Institution	Identification Methods	Enrichment/Instructional Strategies	Notable Features/Challenges
<b>Agastya International Foundation, Bengaluru</b>	Parent & teacher nominations; aptitude tests	Project-based learning, science enrichment programs	Strong outreach to rural/underserved communities; resource constraints in scaling
<b>Cluster Innovation Centre, New Delhi</b>	domain-specific tests, structured screening tools developed with academic rigour.	innovation projects, Hand holding, Counselling and Guidance,	University-linked model; limited reach beyond urban centers. Time bound Project.
<b>GEAR Innovative School, Bengaluru</b>	ICIT, CFIT, scholastic skills tests	Differentiated instruction, level-based learning, 3 TIER Instruction,	Focus on individualized pathways; private initiative accessible mainly to urban families
<b>Jnana Prabodhini Prashala, Pune</b>	Intelligence & personality tests (grades 6–9); aptitude tests (grades 10–12) Nominations	Enrichment programs, accelerated curriculum, Project based learnings.	Longstanding tradition in gifted education; emphasis on leadership and social responsibility and Mentorship
<b>Kaveri Gifted Education and Research Center, Pune</b>	Parent & teacher nominations; SMAT	Talent-specific enrichment, differentiated instruction	Research-oriented NGO; limited resources but strong advocacy
<b>MENSA, Delhi</b>	Two-level entrance examination; IQ tests	Enrichment workshops, problem-solving clubs	Internationally recognized model; selective admission limits inclusivity
<b>The Galaxy Education System, Rajkot</b>	Scholastic skills and talent assessments (ASSET)	Clubs (science, math, arts), project-based learning, Sports training, Differentiated Instruction, STEM projects, Resource centers for Twice exceptional students.	Holistic approach with co-curricular emphasis; challenges in identification of students.

In India, gifted education faces three main issues. First, there is no single national tool for identification. Schools and programs use a mix of tests, academic results, and teacher nominations, which makes the process uneven. Second, the teaching methods vary. Some use enrichment activities, faster curricula, differentiated lessons, or project-based learning. Third, access is not equal. Private programs mostly reach urban families with resources, while NGOs try to support children from disadvantaged backgrounds but often struggle with money and scaling their work. Together, these points show that gifted education is still fragmented and needs a more consistent approach. The above institutions and organisations have been consistently working in this area trying to provide need based services to gifted learners. Without the committed efforts of these organisations and national bodies like NIAS, CIC and NCERT the gifted education would not have had seen any significant contributions.

### **Programs and Models for Gifted Students in India**

Field observations revealed a diverse range of programs and pedagogical models designed to nurture gifted learners across institutions. These approaches reflect both philosophical orientations and contextual realities, highlighting innovation despite the absence of standardized national frameworks.

### **Panchakosh Model for Holistic Development**

Emphasized strongly at the *Kaveri Gifted Education and Research Center (Pune)*, this model integrates physical, emotional, intellectual, and spiritual dimensions of learning. It seeks to cultivate the whole child, ensuring that giftedness is not restricted to cognitive ability alone but extends to balanced personal growth.

### **STEM and Cross-Age Learning Approaches**

Observed prominently at *The Galaxy Education System (Rajkot)* and *GEAR Innovative School (Bengaluru)*, these institutions prioritize hands-on STEM learning through mobile labs, lab-on-a-bike, lab-in-a-box, and lab-on-a-tab initiatives. Cross-age learning, outdoor trips, and group activities foster peer mentoring and collaborative problem-solving, enabling gifted students to learn both with and from others.

### **Psychometric Testing and Inclusion of Underprivileged Learners**

*MENSA India (Delhi)* places strong emphasis on psychometric testing for identification, ensuring rigor in screening processes. Importantly, MENSA extends opportunities to tribal and socio-economically disadvantaged children, reflecting a commitment to equity and inclusion in gifted education.

### **Project-Based Learning, leadership and Mentorship Programs**

*Jnana Prabodhini Prashala (Pune)* has been a pioneer in research and the oldest institute which has developed a range of screening protocols and nomination procedures. They have given distinctive focus on project-based curricula and mentorship models. Gifted students are encouraged to pursue inquiry-driven projects under the guidance of mentors, fostering leadership, creativity, and social responsibility alongside academic excellence. They have been promoting talent in sports through their exclusive campuses.

### **Community-Based Experiential Learning**

Agastya International Foundation (Bengaluru) adopts a community-based model, providing project-based experiential training to gifted and talented children alongside their peers. This inclusive approach ensures that gifted learners are nurtured within broader community settings, promoting equity and shared learning experiences.

### **Creative Pedagogical Models**

Institutions also experiment with frameworks such as the CIPP and the School Beyond Walls, which emphasize creativity, experiential learning, and real-world engagement. Differentiated instruction using tiered approaches ensures that students receive challenges appropriate to their readiness levels. This model was observed most prominently in the practices of GEAR Innovative School and The Galaxy Education System, where it forms a central component of their gifted education approach.”

### **Infrastructure and Nurturance Practices**

Across the institutions visited, certain common infrastructural and pedagogical features were observed. All organizations maintain well-equipped science laboratories, computer laboratories, and robotics facilities, reflecting a strong emphasis on scholastic giftedness. In contrast, arts and sports receive comparatively less attention, with nurturance in areas such as music, dance, and athletics provided largely on a case-by-case basis rather than through systematic programming.

The nurturance of gifted learners is often facilitated through outsourcing and external coaches, particularly in specialized domains where in-house expertise is limited. At the same time, nearly all institutions maintain well-resourced libraries, which serve as important hubs for independent exploration and advanced study. Overall, while the infrastructure for scholastic giftedness is robust, the nurturance of talents in arts, sports, and creative domains remains uneven, highlighting the need for more balanced and standardized approaches to gifted education in India.

### **Twice Exceptional Learners**

Across the institutions visited, provision for twice exceptional learners students who are both gifted and have learning challenges was found to be extremely limited. Except for one or two isolated cases, there is no systematic or standardized procedure in place for their identification or support. The majority of institutions explicitly acknowledged a lack of expertise and trained personnel as the primary reason for the absence of services in this area. As a result, twice exceptional learners remain largely invisible within current gifted education practices in India, underscoring a critical gap that requires urgent attention in both policy and teacher preparation.

### **Teacher Training for Gifted Education**

Interviews and group discussions with teachers revealed that teachers engaged in gifted education often enter the profession out of personal passion and commitment, putting in extra effort to nurture students beyond the standard curriculum. While this dedication is commendable, the formal structures for teacher preparation remain weak and fragmented. Teachers receive training through a variety of channels: Recognized courses affiliated with universities, modular programs offered by foreign agencies and online short courses and blended learning modules.

In practice, bright teachers are mentored by senior colleagues, creating a form of legacy learning. Institutions also rely on experts and coaches from interdisciplinary fields to provide specialized inputs. Training opportunities range from half-day workshops to 45-day modules, often spaced across three to six months. However, these are largely short-term and non-standardized. Most importantly, only one long-duration course recognised at a university level was observed across all institutions, emphasising the absence of sustained, structured pathways for teacher specialization in gifted pedagogy.

### **Challenges of Teaching Gifted and Talented Learners**

Teachers consistently emphasized that being an educator for gifted and talented students is not easy. It requires tailoring teaching methods, content, and assignments to individual needs, while simultaneously fostering critical and creative thinking skills. In addition, teachers must be able to recommend students for advanced programs or acceleration when appropriate, which demands careful judgment and sensitivity. Collectively, these responsibilities call for a dedicated, serious, and intensive teaching effort that goes well beyond conventional classroom practice. The observations highlight that while passion drives many teachers to take on this role, the complexity of gifted education necessitates specialized preparation and sustained support.

### **Non-Uniform Practices in Gifted Education**

The institutions visited revealed considerable variation in philosophy, value systems, and pedagogical ideologies, resulting in non-uniform practices for nurturing gifted learners. While a variety of evidence-based strategies such as differentiated instruction, higher-order critical thinking, creative thinking activities, and recommendations for advanced programs or acceleration are recognized as essential, these are not consistently understood, planned, or implemented across schools and organizations. Teachers highlighted that tailoring instruction, content, and assignments for gifted students requires serious commitment, specialized knowledge, and intensive effort. However, the absence of standardized frameworks means that such practices remain uneven and dependent on individual teacher initiative or institutional philosophy. Importantly, these complex demands cannot be adequately addressed through short in-service training programs, which often provide only limited exposure to gifted pedagogy. These observations clearly indicate professional development, the nurturance of gifted learners will continue to be fragmented, leaving students' potential underutilized.

### **Critical Areas Requiring Strengthening**

Field observations and institutional practices reveal that while pockets of innovation exist, systemic gaps remain across four key domains:

- a) **Screening and Identification**  
Current practices rely on varied psychometric tests, parent/teacher nominations, and institution-specific entrance examinations. The absence of a standardized national framework leads to non-uniform identification, risking both under- and over-representation of gifted learners.
- b) **Nurturance Programs**  
Enrichment, acceleration, and project-based learning are offered in select institutions, but these remain fragmented and unevenly distributed. Arts, sports, and creative domains receive less emphasis compared to scholastic giftedness, leaving holistic development under-addressed.
- c) **Equitable and Inclusive Education**  
While some organizations (e.g., MENSA, Agastya) extend opportunities to tribal and socio-economically disadvantaged children, such efforts are isolated rather than systemic. Twice exceptional learners, in particular, remain largely invisible due to lack of expertise and structured support.
- d) **Teacher Preparation**  
Teachers often enter gifted education out of passion, supported by short-term workshops, modular courses, or mentoring. However, pre-service training rarely includes gifted pedagogy, and in-service opportunities are

short, non-standardized, and insufficient. Only one long-duration course was observed, underscoring the urgent need for sustained professional development.

Short in-service workshops of two or three days, though common, are often perceived by teachers themselves as tokenistic or “eye-wash” programs. They provide only superficial exposure to gifted pedagogy and rarely translate into meaningful classroom practice. Given the complexity of teaching gifted learners, tailoring instruction, fostering higher-order thinking, and recommending students for acceleration such minimal interventions are inadequate. By contrast, pre-service teacher training establishes a strong foundation before teachers enter classrooms. It equips them with:

- Knowledge and skills to design differentiated instruction and nurture critical and creative thinking.
- Attitudes, beliefs, and professional commitment that make them confident in addressing diverse learner needs.
- Familiarity with gifted education objectives, rationale, and procedures, allowing them to experiment with strategies during supervised practice.
- Capacity to refine and contribute to curriculum development, ensuring innovation and responsiveness to student needs.
- Embedding gifted education into pre-service training programs and teacher education curricula ensures that teachers begin their careers prepared, rather than relying on fragmented in-service sessions. This approach reduces the burden on already overworked teachers, many of whom report reaching saturation or burnout, and aligns with the NEP 2020’s vision of holistic and inclusive education.

### CONCLUSION

The fieldwork clearly demonstrates that gifted education in India is marked by non-uniform practices, fragmented nurturance programs, and inadequate teacher preparation. While teachers show passion and commitment, the reliance on short in-service workshops has proven insufficient often functioning as symbolic exercises rather than genuine capacity-building. To truly realize the vision of the NEP 2020, India must prioritize pre-service teacher training in gifted education, embedding specialized modules within B.Ed. programs and creating sustained pathways for professional development. Only by equipping teachers with foundational knowledge, reflective practice, and curriculum innovation skills before they enter classrooms can the system move beyond piecemeal efforts toward a coherent, equitable, and holistic framework for nurturing gifted and talented learners.

### REFERENCES

- [1]. Maitra, P. (2006). Conceptions of giftedness in the Indian context. *Journal of Indian Education*, 32(1), 15–28.
- [2]. Kurup, A., & Maithreyi, R. (2011). Gifted education in India: Current challenges and future prospects. *Indian Journal of Applied Research*, 5(2), 45–52.
- [3]. Jambunathan, S., & Jayaraman, R. (2011). Development of an academic competency checklist for gifted learners in India. *Indian Journal of Applied Psychology*, 48(2), 45–59.
- [4]. Sharma, J. (2014). *National level project on identification of gifted children in science and mathematics*. Cluster Innovation Centre, University of Delhi. Funded by Office of the Principal Scientific Adviser (PSA), Department of Science and Technology, Government of India.
- [5]. Subotnik, R. F., Olszewski-Kubilius, P., & Worrell, F. C. (2011). Rethinking giftedness and gifted education: A proposed direction forward based on psychological science. *Psychological Science in the Public Interest*, 12(1), 3–54.
- [6]. Kurup, A., & Maithreyi, R. (2012). Inclusive education and gifted learners: Policy gaps in India. *Journal of Education Policy*, 27(3), 321–335.
- [7]. Roy, P., & Kurup, A. (2016). Gifted education in India: Advocacy and practice. *Gifted Education International*, 32(2), 140–152.
- [8]. Renzulli, J. S. (2016). The three-ring conception of giftedness: A developmental model for promoting creative productivity. *Gifted Child Quarterly*, 60(4), 220–231.
- [9]. Roy, P. (2017). Gifted education in India: Emerging perspectives. *Journal of Education and Practice*, 8(10), 55–63.
- [10]. Balakrishnan, V. (2018). Gifted education in India: Current status and challenges. *Journal of Indian Education*, 44(3), 15–28.
- [11]. World Council for Gifted and Talented Children. (2019). *Global perspectives on gifted education*. WCGTC Publications.
- [12]. Ministry of Education. (2019). *Pradhan Mantri Innovative Learning Programme – Dhruv*. Government of India retrieved from <https://www.education.gov.in>



- [13]. Government of India. (2020). *National Education Policy 2020*. Ministry of Education.
- [14]. <https://nias.res.in>
- [15]. <https://ducic.ac.in>
- [16]. <https://olympiads.hbcse.tifr.res.in>
- [17]. <https://www.sih.gov.in>
- [18]. <https://ncert.nic.in>