

Nurturing Gifted children

India has faced a plethora of challenges in its education system for years. According to the most recent Legatum Prosperity Index Report (2018)¹, India's education system ranks at # 104 among the 149 countries surveyed. Other countries such as Finland (# 1), Canada (# 8), Australia (# 8), United States (# 9), United Kingdom (# 12), South Korea (# 17), Japan (# 21), Russia (# 22), China (# 44), Mexico (# 58), Greece (# 59) and Brazil (# 91), all rank above India when it comes to Education. This ranking is based on access, quality and human capital. On the contrary, when it comes to Economic Quality, Business Environment and Governance, similar to any upwardly mobile nation, India ranks respectively at # 58, # 51, and # 40 in these categories. With the rising dependence on automation, India should be diverting its resources and political will, not just to curb illiteracy but to accomplish educational prosperity as well. Such prosperity can only be achieved by making fundamental changes in our educational system.

According to a recent press release by United Nations International Children's Emergency Fund (UNICEF)², when it comes to educational success of a nation, the following recommendations can reduce inequalities in children's education:

1. Guarantee high-quality, early-childhood education and care to all children.
2. Ensure all children achieve a good minimum level of core skills.
3. Reduce socio-economic inequalities.
4. Close the gender gaps in achievement.
5. Produce more high-quality, cross-country, comparable evidence including longitudinal studies to fill knowledge gaps.
6. Focus on equality, not just averages.

Previous reports of the Indian Government such as the Kothari Commission Report (1966) and the Yashpal Committee Report (1993), have acknowledged deficiencies in the Indian educational system quite elaborately; joyless learning, rote-learning, student drop-outs, teacher absenteeism, outdated curriculum, irrelevant and inconsistent assessment patterns, and administrative and bureaucratic loop-holes, indicating the need for systemic reform. Nonetheless, there is optimism that this landscape could be changing. Much is being done by the government on formulating the National Policy on Education (NPE), reforming teacher education through the National Council for Teacher Education (NCTE), amending the Right to Education Act (RTE), strengthening distance education through the UGC and improving primary and secondary education, to name a few initiatives.

Alongside these initiatives, the Pune International Centre (PIC) has been working on the novel area of “Nurturing Gifted Children”. “Gifted” is an all-encompassing term used to signify high ability children who have the potential to accomplish exceptional success in one or more domains such as numerical, logical, social, scientific, entrepreneurial, political or artistic. The term *talented* is often used interchangeably to convey this type of domain expertise. It is assumed that 10% of the population is gifted or talented.

According to the United States National Society for the Gifted and Talented (NSGT)³ the definition of Gifted includes all areas of a child’s life: academic, artistic and social. Many schools and institutions in India and abroad that serve the *gifted* students limit their definition to academic achievements, however, it is important to identify early and focus on areas of artistic and social development. Lastly, this definition does also recognize that while all gifted students have the ability (potential) to achieve at high levels, some may not have realized or demonstrated that potential yet. Such students may exhibit testing challenges, learning differences, or represent underserved populations that lack the nurturing environment required to realize their special talents or giftedness. As a well-known American psychologist, Linda Silverman⁴ mentions in her book *Giftedness 101: When we equate giftedness with achievement in school, or with the potential for noteworthy achievement in adult life, we create an inequitable criterion for children of minority backgrounds, from broken or economically disadvantaged families, and women.*

One of the logical questions that follows is, why is it so important to nurture *Giftedness*? There will be approximately 5 crore gifted children between the ages of 6 and 25 in India, in the next decade. This creates unique challenges as well as opportunities for positioning India in a global context, in the coming decades. It is essential that this immense national resources of 5 crore children has proper guidance and direction to realize their full potential in life. Considering that India’s population will exceed China’s population in the next few years, a unique ecosystem to nurture and support gifted children will be required.

PIC has identified three models of schooling that are currently in practice in India, for nurturing gifted children through a K-10 + 2 system:

1. **Exclusive model:** A relatively small number of mostly private selective schools across India accept students with higher academic potentials and challenge them beyond their academic curriculum. The entrance tests are based on prior academic achievement,

strengths in certain subjects or domains (e.g. mathematics, sciences, and languages), and scores on standardized diagnostic tests or IQ tests.

2. **Semi-exclusive model:** These are after-school programs that offer extra coaching/training to a small number of students with higher potential in addition to the regular classroom instructions. This is more common in western countries with after-school programs such as GATE (Gifted and Talented education), however, we also found the tribal MENSA program run near Pune by Dr. Narayan Desai in agreement with this model.
3. **All-inclusive model:** The most common model in Indian public school where everyone in the class is taught at the same level irrespective of their potential. We recommend that more and more public schools should move to the semi-exclusive model from the all-inclusive one.

While educating gifted children is often marketed as an investment in future leaders by experts, it is also true that gifted children have their own set of special needs and requirements which need to be addressed, if their learning is to be accelerated. The educational goals for such learners cannot be fit into a standard, one-size-fits-all curriculum. In line with this, we believe that a holistic mechanism for nurturing their abilities needs to be devised in a way that it would not feel like regimentation for these children. Gifted children are often more mature, conscious, objective, conscientious, compassionate, and sensitive compared to their peers. On the other hand, nurturing itself is a dynamic and multifaceted term, so ideally, the process should include education inside and outside of the classroom that engages the mind, body and spirit.

Based on these findings, PIC make the following recommendations for accelerating the learning and achievement process of gifted children, all while emphasizing equality and access as prescribed by UNICEF because privilege should not become a barrier for nurturing a gifted student:

1. **Reconfiguring the National Talent Search Exam (NTSE):** NTSE is one of the most prestigious national level scholarship programs aimed to 'identify' talented individuals and nurture them. This exam is conducted by National Council of Education Research and Training (NCERT) for Std.10th students. Some of the challenges with the current NTSE and future recommendations are as follows:
 - i. The NTSE is currently offered in Std. 10th, which is extremely late for identifying or screening talent for the purpose of nurturing it. We recommend that it should be offered

earlier, towards the end of primary education or latest by Std. 8th. This way, it could help identify students for special educational enrichment programs, academic acceleration, and early career advising. For this, new curriculum should be established to be in line with testing in lower grade levels such as Std. 5th or 8th.

- ii. Testing in regional languages: Currently, the NTSE is only offered in Hindi or English. This limits the participation of rural or tribal children who might not be fluent in either Hindi or English. This particular issue is of great concern considering that even in the United States of America, where driving is a privilege, the driver's license test can be taken in regional Indian languages such as Tamil, Punjabi or Gujarati. We recommend that the NTSE test be designed in all regional languages.
- iii. Appropriate resources and coaching for all: The two major parts of NTSE exam are Mental Ability Test (MAT) and the Scholastic Ability Test (SAT). As with any universal standardized test, results of NTSE favor students who have the time and resources to prepare for the rigor of this exam, especially on the SAT part. The results might also display gender preferences in communities where girl students are not educated with the same enthusiasm as boys. In order to address this income or gender inequality, we recommend that all learning material should be provided free of cost or at discounted prices to families who are unable to afford it. Besides this, online e-learning resources should be made available to all students who have the potential to self-learn the complex material. The outcome of this test should not depend on students' ability to afford expensive private tutoring and coaching. On this matter, we recommend that the private sector and NGOs could step in to create high quality, interactive online material similar to the material created by the international nonprofit organizations such as Khan Academy, for preparation of standardized tests in the United States.
- iv. Revising the scholarship amount and awarding it based on financial need: It is our understanding that since 2014-15, students who qualify the second stage of NTSE are being awarded INR 1250 per month for Std. 11th and 12th, and INR 2000 for baccalaureate and post-baccalaureate studies. In line with the inflation rate, these amounts should be adjusted to INR 1450 and INR 2400 respectively, especially for qualified student experiencing financial hardships. After that, students could be rewarded on a sliding scale based on their family's financial situation. Also, future award amounts should be revised every four or five years and should reflect the rising inflation.

2. **Priority, consistency and commitment:**The government needs to prioritize primary and secondary education a lot more than it does at the moment. While the 12thFive-Year Plan (2012-2017) had recommended Rs. 27,466 crore to be allocated to Rashtriya Madhyamik Shiksha Abhiyan (RMSA), only Rs. 19,372 crore was allocated and even lesser was spent.Enrollment has steadily increased until 2015 but India's overall spending on education as a percentage of GDP is still much lower than its counterparts in BRICS. Public spending on education must, at bare minimum, meet the recommended amount and more investment must be considered in future.

3. **Teacher training and teaching reform:**

- i. Differentiated Instruction (DI): the teacher must design her teaching methodology and lesson plans according to the student's potential and ability.
- ii. Quality of teacher training: teacher training in TEIs must be professionalized, and a deep focus on 'teachers as philosophers' must be maintained.
- iii. Teacher autonomy: the autonomy that comes with decentralization of education as a state subject must also extend beyond its bureaucratic execution to teacher autonomy in the classroom.
- iv. Reform of National and State Eligibility Test (NET & SET): A committee of expert teachers must be formed, in collaboration with international experts, to redesign this process. The entrance tests must be made more competitive and they must assess the candidate's 'critical thinking' ability.
- v. The teacher education (TE) program must be an integrated program, with a focus on research. Separate "tracks" for teacher training to focus on specializations must be introduced.
- vi. Four key factors must be focused on for both teacher education (TE) as well as the education of gifted children- Self-selection, Opportunity, Autonomy, and Acceleration.
- vii. The active teaching hours should be restricted to a lesson time of 35 mins daily. This is possible with the constructivist methodology.

4. **Curriculum reform:**

- i. The Constructivist method of learning must be incorporated into schools. Unit based learning should be facilitated.

- ii. Theory of Knowledge (ToK) as a subject must be introduced for secondary grades
- iii. Gifted children should be allowed to pursue self-paced learning; dropping elective subjects that are not their core strengths must also be a part of this process.
- iv. Multiple forms of “accelerated learning” such as early entry into school, non-graded classroom, grade skipping, curriculum compacting, concurrent enrollment, grade telescoping, and leveling within the grades must be made possible.
- v. Activities and academic subjects that encourage collaboration and learning from peers should be incorporated.

5. Systemic reform:

- i. Abolishing multiple boards: curriculum must be central while the delivery must be left to the states.
- ii. Multiple testing points for gifted children: Testing of children should be possible at multiple entry points starting from kindergarten and results should be used to guide and direct teaching methodology and mentoring.
- iii. Alignments between schooling and higher education (HE): the reforms within the schooling system must allow for a fluid transition into HE for gifted children, and not create obstacles and hindrances.

6. Integrating distance education:

- i. Live E-learning can be a very useful method as it is interactive and the student and teacher are connected virtually, while archived content is available for referencing. When done right, it can prove to be very convenient, flexible and effective for students, especially for those from remote areas.
- ii. More investment required for infrastructure and staffing at examination centers for online courses offered by Universities.
- iii. For rural areas using voice-over in the local dialect and/or having a co-teacher as an interpreter for the local dialect would be useful.

- 7. Pilot schools and rural programs:** State governments can run a few pilot schools incorporating previously defined models of learning for gifted children. Progress can be documented through annual monitoring and assessments.

8. **Joint task forces/Committees** of former gifted students and experts from the private, public and NGO sector should be formed under the direction of government. The committee members should interact directly with the gifted children through visits and mentoring.
 9. **Community service:** Current gifted students from private schools should teach those from the public schools as part of after-school peer tutoring or community programs. This would need restructuring the daily school schedules.
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Resources

1. The Legatum Prosperity Index 2018: <https://www.prosperity.com/globe/india>
2. National wealth does not guarantee education equality, a UNICEF press release: <https://www.unicef.org/press-releases/national-wealth-does-not-guarantee-education-equality-unicef-report-says>
3. Giftedness Defined: National Society for the Gifted & Talented (NSGT): <https://www.nsgt.org/giftedness-defined/>
4. Silverman, L. K (2013). Giftedness 101 (Psych 101), 1st Edition. Springer Publishing Company, LLC. New York, NY.