

Identifying and Nurturing Talent Cannot Be Left to Chance

Lodha Genius Programme, that has offered support to over 500 students at Ashoka University, has expanded to include younger students at IISER Pune

In 1913, a largely self-taught mathematician from erstwhile Madras wrote a letter to a Cambridge professor, GH Hardy. The letter contained theorems so unusual that Hardy initially suspected a fraud. On closer inspection, he concluded the opposite: he was looking at the work of a genius. The mathematician was 25-year-old Srinivasa Ramanujan.

Had Hardy not responded, had the letter been lost, or dismissed, the arc of 20th century Mathematics would have looked different. Ramanujan's story is celebrated as a triumph. It is also, quietly, a warning. A system that depends on a chance letter reaching the right desk is not a system; it is luck.

The question this raises is not sentimental. It is practical: how many Ramanujans were never found. In India alone, current estimates suggest there are over 3.4 million gifted adolescents between the ages of 12 and 18 — a number projected to exceed four million by 2047. Virtually, no systematic institutional pathways exist to identify them.

Measurable Traits

Decades of research in developmental psychology point to a consistent finding: the cognitive and personality traits associated with high achievement — working memory, processing speed, intrinsic motivation, tolerance for ambiguity — are measurable in children well before adolescence, and they are predictive of long-term outcomes in ways that later assessments often are not.

The case for early identification rests on a substantial body of longitudinal research. The Study of Mathematically Precocious Youth, begun at Johns Hopkins University in 1971, tracked intellectually gifted individuals over 50 years. Its findings are among the most robust in educational research: early identification of high ability is one of the strongest predictors of adult achievement in research, entrepreneurship, and leadership — outperforming socio-economic background and school quality.

High-ability students in unstimulating environments do not simply wait patiently for challenge. Research consistently

shows they disengage, develop maladaptive coping strategies, or redirect their energy towards whatever is interesting to them — which may have nothing to do with school. Prolonged understimulation during critical developmental periods leads not just to boredom but to lasting damage to motivation and academic identity.

The lack of identification of talent and pathways to nurture it systematically is compounded by geography and inequality. Talent, by all evidence, is roughly uniformly distributed across populations. Opportunity is not. In India, gifted learners in rural or under-resourced contexts often remain entirely invisible within mainstream schooling, while urban students from resource-rich families are far more likely to encounter



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—Mahika Shishodia, deputy programme director, Genius Development, Lodha Foundation



ter advanced instruction. The result is that chances of identification and access to effective nurturing pathways are strongly correlated with affordability.

India's heavy reliance on competitive examinations — the IIT and IAS entrance process being the most visible examples — compounds this further. Such systems are powerful sorting mechanisms. But sorting and

developing are not the same thing. A student can survive the exam system and still never encounter the sustained intellectual challenge, mentorship, or original inquiry that transforms ability into genuine expertise.

Consider Maitri, a class VII student from Pune who has already authored *The Mystery of Missing Numbers*, a mathematical adventure no-

vel that earned a national jury award. She entered the 'Lodha Genius Science Circles' almost by accident: her father registered her, and she found out a day before the assessment. What followed was not a curriculum — it was a conversion.

Despite language, social, and cultural barriers, she built a telescope from scratch at the Inter-University Centre for Astronomy and Astrophysics (IUCAA). She engaged with redox chemistry far beyond her syllabus, and left with something far more valuable: critical thinking. "In school, we learn what happens," she reflected, adding, "Here, we learned why". She arrived shy and bound by assumptions; she left with the instinct to question.

That transfor-



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Unrecognised: Despite 3.4 million estimated gifted adolescents in India aged 12-18, many remain unidentified.

Expenditure: <1% India's R&D spend as a share of GDP, well below OECD averages.

mation — from passive receiver to active inquirer — is precisely what large, sorting-driven systems often struggle to nurture. When such a shift is combined with mentorship and a community of high-potential peers, it can create a disproportionate, long-term impact on society.

Strategic Choice

This is why the Lodha Genius Programme, that has offered support to over 500 students at Ashoka University, has expanded to include younger students at IISER Pune. It is no coincidence that more than 150 students of these have gained admission to leading universities and produced research that makes the future look promising.

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turns. Countries that have done this seriously — Singapore, Israel, South Korea — have seen their investments closely linked to strong research output, technological competitiveness, and global influence. These are not coincidences. They are the product of systems that decided, deliberately, that demographic scale alone does not translate into intellectual leadership.

What is needed now, for a Viksit New Bharat, is a coordinated shift. Governments, philanthropy, educators, and parents must come together not to depend on rare 'happy accidents', but to deliberately invest resources in building systems that surface talent early, creating multiple pathways for recognition, and ensuring that promising ability is identified and nurtured before it fades into the noise.

