

# Identifying Potentially Gifted Children

In the first article in this series, we discussed the concept of giftedness and its components according to Joseph Renzulli's widely-accepted three-ring model, in which giftedness is said to result from the interaction of high levels of intelligence, creativity, and task commitment. A child who displays high potential in these components is identified as a potentially gifted child.

## These components can be measured as follows:

### 1 Behavioural Rating Scales:

Rating-scales of observable behaviour enable parents, teachers, peers to nominate a potentially gifted child. Nomination is particularly useful in assessing task commitment, which is difficult to measure in a time-limited testing scenario.

Teachers are able to compare a child with hundreds of others of the same age; experienced teachers can often accurately identify a child who exceeds his/her peers in learning, reasoning, or leadership.

Nominations are not foolproof, however. Studies in the US find that teacher nominations show the same systematic biases as older IQ tests: minority and poor children are under-represented. Teachers may focus on high-achieving, conforming children and may fail to identify children who underperform or misbehave. This is likely to hold true in India, where students are recognised for neat work and rote learning, rather than for divergent or critical thinking. Teacher nominations may thus miss a significant number of gifted children, particularly those who would



most benefit from identification. Pre-training of teachers to use the Nomination Behavioural Rating Scale is critical and can increase its effectiveness.

Nominations by parents can tap long-term observation and in-depth knowledge of the child. The probability of greater bias and limited scope for comparison as parents can be a cause of worry.

Peer nominations are also useful. From a young age, children compare their own abilities with their peers'; even young children can accurately answer the question: "Who in your class is good at Maths (or any other activity)?"

A child can also nominate himself/herself. Self-nomination acknowledges the importance of interest or motivation in achievement. In any enrichment programme, there should be room for children who – even if not identified by any other measure – display an interest in learning.

## 2 Testing

Psychometric tests estimate an individual's standing on a behaviour/trait by assessing the individual on a sample of items relevant to the behaviour/trait. Standardised psychometric tests of IQ (general intelligence) and aptitude (specific intelligence, or achievement in a specific domain) provide a useful and objective measure of the child's ability in developmental and normative terms. It is important that the tests used have Indian norms.

For first-level screening, tests can be administered in a group. At the second level, individually-administered IQ tests may be used for a more precise and componential measure of IQ. Individual tests assess children on several subareas of intelligence, pinpointing strong and weak areas. Patterns in sub-scores also help identify sub-populations of gifted children who need special attention, e.g. visual-spatial learners and twice-exceptional children. This will be discussed in the next article of this series.

IQ tests have been criticised for measuring only a few types of intelligence, for being biased against ethnic minorities and the socio-economically and educationally

deprived, and for not defining the construct they claim to measure. However, a vast body of research demonstrates that while intelligence is difficult to define it is paradoxically not as difficult to measure. IQ tests do measure something meaningful and measure it reliably, and what they measure is an important predictor of a large range of outcomes from educational and career achievement, life satisfaction, and income to health and criminal behaviour. IQ scores also show considerable stability over the lifespan – scores obtained in early childhood and in high school correlate at .50. Higher education, however, reduces this correlation. This suggests that while innate ability is very important, environment also plays a crucial role. IQ tests have survived strong criticism and remain both useful and widely-used.

Another caution in the use of IQ tests applies to psychometric testing in general. Psychometric test-scores are useful as one source of information in making decisions about an individual. Test-scores should not be the only data used to make such decisions! A test-score is an estimation of the child's ability at that point of time and is affected by numerous factors such as interest in the given task, mood and arousal on test-day, and motivation. No test-score "represents" a child or his/her ability.

Contrary to popular belief, creativity can be defined objectively. Experts within a field (e.g. art) agree on what constitutes creativity in that field. The work of young and adult gifted individuals differs systematically from the work of the non-gifted with respect to productivity and creative quality. Creativity can be measured validly by psychometric tests. This has been made possible by research which has identified component processes of creativity.

## 3 Portfolio assessment

An ongoing portfolio of a child's work is an indicator of his/her abilities and achievement. In fields where precocity is important, assessing what the child already knows or can already do is important. The drawings of children with artistic gifts, for example, differ systematically from the drawings of age-peers. An expert can identify artistic gifts via portfolios even

in very young children. Not all types of abilities are liable to early identification, but a portfolio of the child's work has value beyond serving as a source for gifted identification.

One of the best predictors of future creative achievement is past creative achievement. Portfolios are a useful adjunct to psychometric tests in identifying creativity, particularly in domains where no satisfactory test of specific aptitude exists.

### Testing vs. assessment

J. Renzulli distinguishes between testing and assessment. The major difference is that testing happens once or twice; assessment is ongoing. A comprehensive assessment programme tracks the child's abilities, interests, achievements, and concerns over time. A comprehensive identification programme should consider information from several sources, i.e. academic and extracurricular performance, nominations and observational data, standardised psychometric test-scores, and portfolios.

### Age for Identification

At what age can we reliably identify giftedness? While intelligence has a substantial genetic component, IQs do change over time. This is why ongoing assessment is crucial. Tests of development and ability begin in infancy. However, for a more reliable identification of giftedness, it is best to wait till primary school when key language and motor milestones — which most ability tests rely on — are well-established.



**The National Institute of Advanced Studies (NIAS)** is conducting a project on the Identification of Gifted Children

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For more information on the project and the NIAS Gifted Identification programme, access [www.prodigy.net.in](http://www.prodigy.net.in)