

Twice-exceptionality exists where the gifted population overlaps with the population of special-needs children. Special-needs children include those with learning disorders (e.g. dyslexia, dyscalculia), behavioural disorders (ADHD/ADD, conduct disorder), sensory or sensory processing disorders (blindness, auditory processing disorder), physical handicaps, psychological and emotional disorders (childhood depression), and developmental disorders (e.g. autism). A twice-exceptional learner is one who both 1) has one or more special needs and 2) demonstrates above-age-level potential in one or more areas.

Twice-exceptionality is a clinical diagnosis and does not merely refer to a difference of ability between domains. The fact that your child excels at language but is mediocre in mathematics does not make him twice-exceptional; highly gifted individuals frequently show uneven performance across domains in any case. In contrast, a twice-exceptional child with 'nonverbal learning disorder', for example, is gifted in verbal ability but has significant difficulty with nonverbal communication and pragmatics (e.g. understanding others' body language, understanding humour), prospective memory (remembering to do something) and following instructions, numerical and spatial tasks including navigation, and visual-motor coordination. If your gifted child shows a large discrepancy in performance between domains, get her tested for a learning disorder. As the parent of a twice-exceptional

child, you need to nurture her gift and manage her disability. You cannot ignore the disability, hoping that enrichment and affection will 'cure' it. Remember this is a clinical situation. An unmanaged disability hampers all aspects of your child's life, including the development of her gift. Ignoring the disability may also convey to your child that it is something to hide, damaging her self-esteem.

The biggest challenge is identification; early identification is crucial to appropriate intervention and optimal development. Most special educators in India are not trained to identify twice-exceptional learners. Psychometric ability tests such as the WISC, designed to identify 'mainstream' giftedness, are occasionally used to identify learning disabilities, but have not been found to be reliable indicators of twice-exceptionality. Academic performance, too, is a poor diagnostic tool: while their special-need holds these children back from their full potential, their coexisting gift often compensates to some extent. Hence, they often achieve at average levels — even though this represents under-achievement for them. Even in countries with established gifted education programmes, twice-exceptional learners may never be identified, or identified only in college.

The usual way a twice-exceptional child comes to a teacher's notice is through problem behaviour: restlessness, incomplete work, and hyperactivity. The child may then be labelled a 'problem child' and is at high risk for disturbed relationships with school, teachers, and peers. Even without such labelling, twice-exceptional learners are already at elevated risk for socio-emotional problems such as poor self-concept and high frustration. Most gifted children struggle to some degree with the high structure and low challenge of mainstream classrooms; however, not all gifted children with classroom behaviour problems are twice-exceptional!

In other cases, parents may notice signs of giftedness, but the special-need obstructs full assessment of the child's potential. A complete assessment of a potentially twice-exceptional learner thus requires concurrently identifying the special-need and the gift. More importantly, teachers need to be made aware of twice-exceptionality so that the child is identified and given special intervention and counselling in or out of school.

Characteristics

Twice-exceptional learners frequently display certain characteristics (McEachern & Bornot 2001):

- Advanced vocabulary and good oral communication
- Poor handwriting and trouble spelling basic words
- Trouble sitting through class, but can become immersed in special interests (in ADHD children, this is called 'hyperfocus')
- Divergent thinking skills and novel problem-solving strategies

Characteristics specific to disorders include:

ADHD/ADD

Diagnosing twice-exceptional learners with ADHD is complicated by the fact that ADHD and giftedness, separately, share many traits including rapid speech, impulsivity, hyper-sensitivity to stimuli, intense curiosity, and adjustment problems (Kaufmann, Kalbfleisch, & Castellanos 2000). How then do we distinguish a child who has ADHD and a gift from a child who has either one or the other?

Compared to children with ADHD only (who tend to demonstrate general inattention and dislike for school), gifted children with ADHD demonstrate high-level interest and performance in one or more areas. Compared to other gifted children, gifted children with ADHD demonstrate inconsistent academic performance, poor handwriting, and preference for group activities. There is a possibility that gifted children with ADHD may even display areas of superiority over gifted children without ADHD, especially in creative problem-solving.

Autism

There are two categories of twice-exceptional learners with autism:

- I. Autistic savants: These individuals have extremely limited general cognitive, metacognitive, social, and emotional development, but possess extraordinary ability in a specific area, usually memory, mathematics, or music.
- Asperger's syndrome: Individuals with this mild form of autism have poor motor coordination, formal speech, hyper-sensitivity to
 certain stimuli, and obsessive-compulsive tendencies. Strengths are in visual-spatial ability, memory, and intense focus on specific
 intellectual topics (Frith 2004; Neihart 2000).

Dyslexia

Gifted children with dyslexia tend to be poor readers and have low sequencing skills, but excel at performance tasks and display high visual-spatial ability.

Auditory/visual processing deficits

Children who perform normally on tests of vision and hearing may still have problems with the brain functions that allow us to attend to, discriminate, recognise, and understand auditory/visual stimuli. Either type of deficit can impede language learning. Gifted children with visual processing deficits may however excel in speed of learning, memory, communication, and problem-solving skills.

Diagnosis

Clinical assessment methods that have shown promise in identifying the twice-exceptional learner use nonverbal and performance-based tests and tests of creativity in addition to traditional verbal IQ tests. The use of multiple criteria is crucial in diagnosing twice-exceptional learners, including psychometric tests, standardised achievement tests, teacher observations, and parent and peer reports.

Intervention

Twice-exceptional learners need to be challenged in their area of giftedness while also receiving services at a level appropriate to the degree of their disability. Presentation of academic material using multimedia, alternative methods of assessment, and focus on creative problem-solving within structured environments optimise the development of a twice-exceptional learner. Most Indian schools however are not in a position to design such individualised interventions. A psychologist or psychiatrist can help parents to implement appropriate interventions outside school.

Within the classroom, teachers can take certain measures to facilitate the adjustment of twice-exceptional learners:

- 1. Reward creative responses and alternative problem-solving strategies;
- 2. Promote social skills by encouraging children to present their work before peers;
- Take into account different learning styles when teaching or testing.
 Supplement verbal instructions with visual aids, and encourage students to supplement their answers with pictures or concept maps;
- 4. Allow children to select their own rewards (such as a book or puzzle in their area of interest) for completing tasks.

Contributed by Prof. Anitha Kurup and Ms. Amita Basu, Gifted Education Team, NIAS



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

For more information on the project and the NIAS Gifted Identification programme, access www.prodigy.net.in