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# Gifted and Learning Disabled: Twice Exceptional Students

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Since Terman's time, a widespread belief about gifted children has been that they regularly score high on intelligence tests and perform well in school (Brody & Mills, 1997). Yet during the last decade, increasing attention has been being given to the confusing question of high ability students who also have learning disabilities. These learning disabled gifted and talented students, or "twice-exceptional students" (Nielsen, Hammond, & Higgins, n.d.), need remediation activities. At the same time, they also require opportunities to promote their own individual strengths and talents in one or more domains in which they have previously displayed their superior abilities.

There are at least three subgroups of twice-exceptional students whose dual exceptionality remains unacknowledged. The first of these groups is comprised of students who have been identified as gifted yet are exhibiting difficulties in school and are often considered underachievers. Many of these students are working at grade level and are likely to be overlooked by the screening procedures that are necessary to identify subtle learning disabilities. Their underachievement is often attributed to poor self-concept, lack of motivation, or laziness. It is often not until school becomes more rigorous that their academic difficulties may increase to the point where they are falling considerably behind peers. Only then does someone ultimately consider that a student has a disability.

A second group includes students who have been identified as having learning disabilities, but whose exceptional abilities have never been recognized or addressed. Inadequate assessments and/or depressed IQ scores often lead to an underestimation of their intellectual abilities. If students' exceptional aptitudes remain unrecognized, their strengths never become the focus of their instructional program. These students are first noticed for what they cannot do instead of the talent that they are demonstrating.

The last and perhaps largest group of unserved students are those who are sitting in general classrooms and are considered unqualified for services provided for students who are gifted or have learning disabilities. The students may appear to possess average abilities due to the fact that their abilities and disabilities mask each other. They typically perform at grade level but unfortunately are also performing well below their potential (Baum, 1990; Brody & Mills, 1997).

### Student Characteristics

Twice-exceptional students are atypical learners who are often characterized as smart students with school problems. These students assume that learning tasks will be easy for them and are not prepared for the difficulty that arises from activities in areas of their disability. This leads to frustration, tension, and fear that eventually becomes defensiveness. Due to this frustration, these students often tend to be aggressive, careless, and frequently off-task. They also cause classroom disturbances, and, similar to learning disabled students, seem deficient in tasks emphasizing memory and perceptual

abilities. In other areas, their learning characteristics resemble those of high ability students. For example, they may excel at assignments involving abstract thinking and problem solving (Baum, 1984a, 1984b; Baum & Owen, 1988).

High ability/learning disabled (LD) students perceive themselves as deficient more frequently in academic areas, which most likely increases their motivation to avoid school tasks. Twice-exceptional students feel shy and perceive themselves as less effective in school. It becomes disheartening for these students with eager, bright minds to continuously experience failure in school while learning and creating successfully at home. This often leads to poor academic self-concepts and makes them feel as if they do not fit in with their peers. They also tend to have more creative productive interests. They are able to conceptualize quickly, to see patterns and relationships readily, to reason abstractly, to generalize easily, and to enjoy the challenge of solving novel problems autonomously. Basic automatic skills such as graphomotor speed, perceptual scanning, sequencing, organization, and study skills are at the center of their difficulties (Barton & Starnes, 1989). Hobbies and interests that require keen motivation and creative thinking abilities are often observed outside of the school environment, while their performance in school is poor (Baum, 1984a, 1984b; Baum & Owen, 1988). These students are often referred to as street smart with school problems.

### Identification

Due to various definitions of giftedness and learning disabilities, problems in identifying students who are twice-exceptional arise. Generally, twice-exceptional students are those who meet the eligibility criteria for both giftedness and learning disabilities. Giftedness usually pertains to high intellectual abilities or potential rather than students' specific accomplishments. Gifted students are commonly depicted as having exceptional abilities or potential for learning and problem solving. Learning disabilities are defined as problems in learning due to a cognitive-processing difficulty in which the dysfunction affects one or more cognitive processes instead of obstructing overall intellectual ability. These disabilities are customarily identified by an inconsistency between their measured potential and their actual performance on academic tasks (Hannah & Shore, 1995). A twice-exceptional student is one who experiences special educational programming to accommodate one or more handicapping conditions while also promoting the student's potential for exceptional achievement in one or more areas in which they may be gifted (Whitmore, 1981).

Twice-exceptional students are not only identified by depressed academic skills, but also by personality and behavioral problems (Waldron, Saphire, & Rosenblum, 1987). Typically, these students suffer from an auditory processing problem, visual perception problem or attention deficit disorder, or display difficulty in following a sequence of verbal directions (Vaidya, 1993). Even considering the research on twice-exceptional students over the last decade, we are still inclined to identify students for gifted programs and special education services as mutually exclusive activities. Too many twice-exceptional students fail to meet the qualification requirements for either program because the identification protocols fail to consider the special attributes of this population. Documentation of underachievement is usually essential to screen for learning disabilities among the population of gifted/LD students.

Numerous researchers in the field of gifted/LD students focus on the Wechsler Intelligence Scale for Children-Revised (WISC-R) score patterns to clarify identification. Currently, the data from this research have shown no consistent pattern of results. Schiff, Kaufman, and Kaufman (1981) reported a notable Verbal-Performance (V-P) discrepancy with Verbal scores higher, while Waldron and Saphire (1990) found that significant discrepancies between Verbal and Performance scores may not be the best indicator of a learning disability in students. Schiff, Kaufman, and Kaufman conclude in their investigation that the group of superior-IQ LD students revealed above-average verbal comprehension and expression skills and numerous creative talents, but they also indicated weaknesses in the cognitive area of sequencing, motor coordination activities, and emotional development. Waldron and Saphire found that these students are inclined to depend on visual skills for word recognition and analysis, and they also performed poorly in auditory areas, such as sound discrimination and short-term memory.

Vaidya (1993) advocates using portfolio-type assessments and creativity tests, in conjunction with information obtained from IQ and achievement tests, to identify twice-exceptional students. The IQ assessments should be used to determine the learner's strengths and weaknesses, while achievement tests may be used to determine giftedness in a specific subject area. The portfolio should provide an insight into the child's thought processes and uniqueness of ideas by including records of ideas, drafts, critiques, journal entries, final drafts, teachers' suggestions, or parents' suggestions. She also recommends the use of creativity tests that measure divergent thinking. One such test, Torrance Tests of Creative Thinking, measures fluency, flexibility, originality, and elaboration. A student's performance on a test such as this one determines the nature of the student's thinking rather than the specific skills used while completing academic tasks.

Like Vaidya (1993), Eisenberg and Epstein (1981) recommend the use of IQ and achievement scores, but they also

recommend using the Scales for Rating the Behavioral Characteristics of Superior Students (SRBCSS) (Renzulli, Smith, White, Callahan, & Hartman, 1976), for example the Learning, Motivation, Creativity, Leadership, Art, Music, Drama, and Communications scales. Sample items include: possesses a large storehouse of information about a variety of topics (beyond the usual interests of youngsters); has rapid insight into cause-effect relationships; tries to discover the how and why of things; prefers to work independently; becomes absorbed and truly involved in certain topics or problems. They also found that peer and self-nominations were valuable, often more than teacher nominations, in identifying twice-exceptional students (Davis & Rimm, 1994).

Regardless of the method used, when identifying students who are gifted/LD, one should search for evidence of a special gift, talent, or the ability to perform at a high level. It is important to remember that the gifts of twice-exceptional students often remain invisible to teachers and sometimes even parents. Often the disability itself masks the student's expression of special gifts and talents. Giftedness in students is often revealed in oral language and memory skills. Their problem-solving capabilities, curiosity, and drive to know are also associated with giftedness. Creativity is an indicator, but it is less reliable and is much more difficult to assess. The emphasis on cognitive abilities used in the creative process is critical to the accuracy of this indicator. One should look for individuals who generate unique ideas, produce creative solutions, or are extremely motivated to engage in complex and sustained creative activity, such as that required to write a novel or produce a play (Whitmore & Maker, 1985). Twice-exceptional students need an environment that will nurture their gifts while attending to their learning disability. It is also important to provide them with the necessary emotional support so that they can better deal with their inconsistent abilities.

### Curricular Needs

When planning for the educational needs of twice-exceptional students, it is important to focus on the development of the strengths, interests, and superior intellectual capacities. Since learning disabilities are inclined to be rather permanent, it is also important to teach and encourage the use of compensation strategies. These strategies could include the use of advanced organizers, technology, and a variety of communication alternatives. Students who have difficulty with short term memory should be taught strategies for remembering (Baum, 1990). Any type of enrichment activity should be designed to develop strengths and interests and to challenge the learner.

Programs need to focus their attention on preventing the disability from becoming a barrier in the development and expression of the child's talent. Students need guidance while trying to accurately understand the nature of their learning disability in addition to the nature of their giftedness. While making students aware of the way in which their disability interferes with their learning, their gifts need to be cultivated. Teachers need to help students shape a healthy, realistic self-concept in which students accept their personal strengths and weaknesses (Whitmore & Maker, 1985). Strategies must be introduced to students so that they can compensate for their learning disabilities. They need to develop alternative ways for thinking and communication so that they can learn according to their strengths (Reis, Neu, & McGuire, 1995).

Vaidya (1993) also points out that while many parents are familiar with the high quality of their gifted child's intellectual ability, they may be concentrating on addressing the difficulties posed by the child's learning disability and neglecting the importance of nurturing their giftedness. Therefore, it is imperative that parents and teachers comprehend the combination of giftedness and learning disabilities.

Twice-exceptional students need an appropriate curriculum that addresses both of their special education needs. These needs relate to their specific intellectual giftedness and to their specific learning disability (Whitmore & Maker, 1985). Students need assistance in areas of weakness, but they also require time to recognize and develop their gifts. Like all students, they especially need enriching and stimulating cognitive experiences where they can use problem-solving abilities and independent research skills.

Gifted/learning disabled students need a program that is challenging and yet also provides structure and strategies to accommodate weaknesses. When a student's talents are identified and nurtured, there is an increased willingness on the part of the student to put forth more effort to complete tasks (Baum, Emerick, Herman, & Dixon, 1989). Students should be encouraged to take pride in their accomplishments and strengths. This will encourage students to compensate for weaknesses by developing strengths (Baum et al.).

### Conclusions

There are at least three subgroups of twice-exceptional students, many of whom are not being properly served by the current educational system. The first group is students who have been identified as gifted yet are exhibiting difficulties in school. Students identified as learning disabled, but whose exceptional abilities have never been recognized or addressed

comprise the second group, and students in general education classes and are considered unqualified for services provided for students who are gifted or have learning disabilities make up the third group.

There are many characteristics associated with twice-exceptional students. No single characteristic is enough to consider a student as gifted/learning disabled, but if a student exhibits many of the previously described characteristics a closer evaluation is warranted.

There is no one absolute identification method for twice-exceptional students. Most experts recommend using IQ and achievement tests along with other data. These data may include teacher rating scales, creativity tests, peer and self-nominations, or a portfolio.

When setting up a curriculum, it is important to individualize the learning tasks for all students. The curriculum needs to develop students' gifts while also providing them with compensation methods to work around their disability. It is also important to engage learners in activities and projects that reflect their personal interests.

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