
TWICE-EXCEPTIONALITY

Psychologists who work in the area of special education sometimes refer to students with two disabilities as having a dual diagnosis, which may be considered to be twice-exceptional. In the field of gifted education, the more commonly used term for a gifted student with a co-occurring disability is “twice-exceptional learner”. This simple definition belies the complexity that underlies the multiple issues associated with twice-exceptionality. Whereas the concept itself is becoming more well-known both in and out of gifted education, professionals still are unsure of the prevalence of twice-exceptionality because no federal agency gathers base-rate data for this group of students. Estimates made through various sources, such as the U.S. Department of Education, suggest that there are approximately 360,000 twice-exceptional students in America’s schools (National Education Association, 2006), making the call for awareness and understanding about twice-exceptionality critical for educators nationwide. This paper is intended for all individuals who wish to know more about this important group of gifted learners so that their multifaceted educational and personal needs can be met and there is recognition that giftedness does not preclude the presence of a disability or vice versa.

In 1972, The Marland Report (U.S. Department of Health, Education, and Welfare) brought giftedness to the educational forefront; yet, there were no legal mandates associated with the Marland Report. In 1975, another federal initiative, Public Law 94-142, (re-named Individuals with Disabilities Education Act [IDEA] in 1990), appeared on the educational landscape. A major accomplishment of this legislation was that it ensured that students with disabilities receive a free and appropriate public education (FAPE). Current IDEA legislation recognizes 13 disability categories: learning disability, speech/language impairment, mental retardation, emotional disturbance, hearing impairment, visual impairment, orthopedic impairment, other health impairment, autism, traumatic brain injury, multiple disabilities, and deaf-blindness (U.S. Department of Education, 2007). Among these 13 categories, this paper will focus on three identified exceptionalities among gifted students with disabilities: Specific Learning Disabilities (SLD); Autism Spectrum Disorder (ASD); and Other Health Impairments (OHI), which includes Attention Deficit Hyperactivity Disorder (ADHD). Those who are interested in learning more about the other 10 disability categories can learn more by visiting the U.S. Department of Education’s website: www.ed.gov.

Despite the fact that the Marland Report and IDEA were federal initiatives and both recognized that students were individuals with cognitive and academic differences who needed individualized attention, they remained disconnected. This changed with the 2004 re-authorization of IDEA (IDEA-2004), which recognized through new regulations, that children who are gifted and talented may also have disabilities. This may seem to have been a move in a positive direction for twice-exceptional students; however, there was another important change

in IDEA-2004 that focuses on the way in which all students could be identified for specific learning disabilities and has the potential to negatively impact twice-exceptional students.

The largest percentage of students (approximately 50% of all students with disabilities) is found in the category known as Specific Learning Disabilities (SLD). Identification of SLD traditionally relied upon a significant discrepancy between a student's level of ability and achievement. This resulted in strong support to expand the identification of SLD procedures to include a procedure known as Response to Intervention (RtI), which was more recently introduced to the field of specific learning disabilities (Fuchs, Mock, Morgan & Young, 2003) and perceived as a correction to the "wait to fail" dilemma.

Briefly, the RtI approach to identifying learning difficulties is based upon an assumption that the classroom curriculum is broadly appropriate and that a student's progress is monitored through daily class work. If the student is not making progress, then it is because an adjustment with the pedagogical process is needed. A special education evaluation that includes a comprehensive evaluation would be necessary only after classroom-based interventions are not successful (Fuchs et al., 2003). This approach is beneficial for average or below average students because it eliminates the "wait to fail" process that resulted when students had to demonstrate a severe discrepancy between ability and achievement to obtain services. Furthermore, RtI is believed to offer an advantage for average or below-average students because they receive interventions, whereas they may never qualify for assistance under an ability-achievement discrepancy model. Likewise, gifted students who do **not** have a learning disability may benefit from the application of RtI to programming because an individualized approach to measurement of success within the curriculum could identify areas for academic acceleration and or enrichment.

The major flaw in the RtI approach is immediately apparent and is related to two inaccurate assumptions. The first wrong assumption is that the "broadly appropriate" classroom curriculum is a good match for a gifted student. The second wrong assumption is that the definition of failure for a gifted child is the same as the definition of failure for a child with average or below-average cognitive ability. The gifted student with a learning disability often times goes unnoticed in the classroom because performance with a broadly appropriate curriculum appears satisfactory to most educators. On the one hand, the "adequate" performance is the result of high cognitive ability, which allows for the student to compensate in a less-than-challenging curriculum. On the other hand, the high cognitive ability is not fully realized because the disability prevents the student from fully expressing his or her talents (National Education Association, 2006; Silverman, 2003).

Failure for a student who has cognitive ability that is one or more standard deviations above average is often missed because his "average" classroom performance appears to be "appropriate"; yet, in reality, the average performance actually represents a "failure to thrive." The level at which a student is expected to "thrive" is best determined through the process of a comprehensive evaluation that includes a cognitive ability test (Assouline, Foley Nicpon, & Whiteman, in revision). If an individualized intelligence test is not available, then using an excellent group ability test can also be helpful as an initial indicator of cognitive ability if it produces an individualized profile that can reveal the possibility of learning difficulties.

A second category identified through IDEA is autism spectrum disorder (ASD), which is a developmental disability that is characterized by severe communication difficulties, social impairments, and behavioral difficulties and intensities. The rate at which ASD is diagnosed across the nation has grown substantially in the past 20 years, and prevalence varies by region (i.e., anywhere from 1 out of 81 children to 1 out of 423 children; Individuals with Disabilities Act Data, 2007). Increasingly, scholars and clinicians are recognizing that students with this developmental disability can also be cognitively and academically gifted. In fact, some broad characteristics of highly gifted children overlap with characteristics of students with ASD (e.g., focused interest on a topic). It is, therefore, crucial that a diagnosis only be made by a professional who is familiar with giftedness and ASD so that there is neither misdiagnosis, nor missed diagnosis (Neihart, 2008; Webb, Amend, Webb, Goerss, Beljan, & Olenchak, 2005).

As another example, determining whether a student who is demonstrating socialization problems such as difficulty making friends or engaging in conversation has these problems because he or she cannot find intellectual peers or because the student has ASD is accomplished only through a comprehensive evaluation. Such an evaluation must include an assessment of the student's cognitive and academic skills, social-emotional status, and adaptive behavior. Additionally, a psychologist should administer instruments developed specifically to determine the presence of ASD (Assouline, Foley Nicpon, & Doobay, 2009). Early identification is preferable as it facilitates the intervention process and increases the likelihood of improved functioning in various environments (National Research Council, 2001).

A third category identified through IDEA is Other Health Impairments, which represents a broad category that includes, among other disabilities, Attention Deficit Hyperactivity Disorder (ADHD). ADHD is characterized by inattentive and/or impulsive and hyperactive behaviors that cause significant impairment in functioning. Prevalence rate estimates are between 3 – 5% of the school age population (American Psychiatric Association, 2000). Therefore, even though ADHD is one of the more commonly diagnosed twice-exceptionalities, its prevalence is still relatively low. Similar to ASD, some characteristics of gifted learners overlap with characteristics of children with ADHD, which can complicate diagnostic accuracy (Baum, Olenchak, & Owen, 1998). For example, gifted students often show inattention symptoms in learning environments that are underchallenging, while students with ADHD typically show inattention symptoms regardless of the environment. More recent empirical research confirms that high-ability students can and do have diagnoses of ADHD, and that their school performance difficulties, behavioral presentation, and family history of an ADHD diagnosis is very similar to average ability students with ADHD (Antshel, et al., 2007). It is therefore critical that diagnosticians become aware of the characteristics of ADHD and how they can uniquely present among the gifted population (Kaufmann & Castellanos, 2000) in order to prevent missed diagnosis or misdiagnosis (Webb et al., 2005).

Best practice necessitates a comprehensive evaluation that includes as much information as possible about a student's cognitive and academic profiles, as well as information about the student's social-emotional and behavioral presentation. This means that educators should draw upon the multiple kinds of professional expertise available, including results from standardized tests, curriculum-based assessment scores, and completion of behavioral surveys and parent

interviews, as well as formal observations, which are critical to making an accurate diagnosis and generating appropriate recommendations. Only a comprehensive evaluation can lay the groundwork necessary for creating an educational environment where the twice-exceptional student thrives in his or her areas of strength and receives appropriate accommodations for the disability. In searching for an accurate diagnosis for the student, parents and educators should seek professionals (e.g., psychiatrists, psychologists) who are, at a minimum, familiar with the diagnostic complexities involved in working with twice-exceptional learners so that misdiagnosis and missed diagnosis are avoided. Psychologists should be able to read and interpret unique patterns of test data so that they accurately identify and promote children's high abilities and talents. They also need to be attuned to the possibility that a student could have more than one diagnosis; for example, students with ASD in many cases struggle with written language to the extent that they have a co-morbid diagnosis of SLD. Qualifications to make a diagnosis of a SLD vary by state. Some states allow specially-trained educational consultants to make such a diagnosis; others require that a psychiatrist or psychologist make the diagnosis. With respect to ASD or ADHD, licensed mental health professionals have the necessary training to make accurate diagnoses.

For many years, educators in the field of gifted education have advocated that a disability does not preclude the presence of giftedness and, increasingly, researchers are generating evidence-based practices for working with twice-exceptional students. For example, Assouline, Foley Nicpon, and Huber (2006) provided suggestions for working with twice-exceptional students, three of which are listed below:

1. A review of student's school records can reveal a pattern of academic strengths and weaknesses that warrants further evaluation. Look specifically for evidence regarding talent areas and possible vulnerabilities. This requires a collaborative effort among regular, special, and gifted educators, as well as with special support personnel such as school psychologists or school counselors.
2. Social-emotional concerns for twice-exceptional students must be evaluated and developed as a focus of the educational plan to ensure students' positive adjustment and long-term success. Development of self-awareness of strengths and weaknesses is especially important to the academic success of a twice-exceptional student. Twice-exceptional students will typically benefit from support groups, both inside and outside of the schools setting.
3. University-based talent searches offer subject-specific ways of discovering bright students who might otherwise be overlooked through traditional gifted and talented programs, especially programs that use a composite score to determine eligibility for gifted programming.

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References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: American Psychiatric Association.
- Antshel, K. M., Faraone, S. V., Stallone, K., Nave, A., Kaufmann, F. A., Doyle, A., Fried, R., Seidman, L., & Biderman, J. (2007). Is attention deficit hyperactivity disorder a valid diagnosis in the presence of high IQ? Results from the MGH longitudinal family studies of ADHD. *Journal of Child Psychology and Psychiatry*, 48(7), 687- 694.
- Assouline, S. G., Foley Nicpon, M., & Doobay, A. Profoundly gifted girls and autism spectrum disorder: A psychometric case study comparison. *Gifted Child Quarterly*. Prepublished February 11, 2009; DOI: 10.1177/0016986208330506.
- Assouline, S. G., Foley Nicpon, M., & Whiteman, C. (In review). Cognitive and psychosocial characteristics of gifted students with written language disorder.
- Assouline, S. G., Foley Nipcon, M., & Huber, D. H. (2006). The impact of vulnerabilities and strengths on the academic experience of twice-exceptional students: A message to school counselors. *Professional School Counseling*, 10(1), 14-23.
- Baum, S. M., Olenchak, F. R., & Owen, S. V. (1998). Gifted students with attention-deficits: Fact and/or fiction? Or, can we see the forest for the trees? *Gifted Child Quarterly*, 42(2), 96 - 104.
- Fuchs, D., Mock, D., Morgan, P. L., & Young, C. L. (2003). Responsiveness-to-intervention: Definitions, evidence, and implications for the learning disabilities construct. *Learning Disabilities Research & Practice*, 18(3), 157 - 171. NASP Position Paper on Identification of Students with Specific Learning Disabilities http://www.nasponline.org/about_nasp/positionpapers/SLDPosition_2007.pdf
- Kaufmann, F. A., & Castellanos, F. X. (2000). Attention-deficit/hyperactivity disorder in gifted students. In K. A. Heller, F. J. Monks, R. J. Sternberg, & R. F. Subotnik (Eds.). *International handbook of giftedness and talent* (2nd ed., pp. 621- 632). Amsterdam: Elsevier.
- Individuals with Disabilities Act Data (2007). <https://www.ideadata.org/PartBChildCount.asp>
- National Education Association (2006). *The twice-exceptional dilemma*. Washington, DC: Author.
- National Research Council (Ed.). (2001). *Educating children with autism*. Washington, DC: National Academy Press.
- Neihart, M. (2008). Identifying and providing services to twice-exceptional children. In S. Pfeiffer (Ed.). *Handbook of giftedness in children: Psycho-educational theory, research, and best practices*. New York: Springer.

Silverman, L. Gifted children with learning disabilities. (2003). In N. Colangelo & G.A. Davis (Eds). *Handbook of gifted education* (3rd ed., pp. 533 - 546). Needham, MA: Allyn and Bacon.

U. S. Department of Education, Elementary and Secondary Education Act (Public Law 107-110). <http://www.ed.gov/policy/elsec/leg/esea02/107-110.pdf> (retrieved 11/06/07).

U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study.
http://ies.ed.gov/ncser/pubs/20073006/tables/table_b1.asp (retrieved 12/10/08).

U.S. Department of Health, Education, and Welfare. (1972). *Education of the gifted and talented*. Washington, DC: Author.

Webb, J. T., Amend, E. R., Webb, N., Goerss, J., Beljan, P., & Olenchak, F. R. (2005). *Misdiagnosis and dual diagnoses of gifted children and adults: ADHD, Bipolar, OCD, Asperger's, Depression, and other disorders*. Scottsdale, AZ: Great Potential Press.

About NAGC

The National Association for Gifted Children is an organization of parents, educators, other professionals, and community leaders who unite to address the unique needs of all children and youth with demonstrated gifts and talents as well as those who may be able to develop their talent potential with appropriate educational experiences. We support and develop policies and practices that encourage and respond to the diverse expressions of gifts and talents in children and youth from all cultures, racial and ethnic backgrounds, and socioeconomic groups. To this end, NAGC supports and engages in research and development, staff development, advocacy, communication, and collaboration with other organizations and agencies that strive to improve the quality of education for all students.