

Critical Issues in the Identification of Gifted Students With Co-Existing Disabilities: The Twice-Exceptional

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Abstract

Federal law ensures all students with disabilities the right to a Free, Appropriate Public Education (FAPE). However, current policies governing a student's eligibility for services may contribute to the underidentification of gifted children with co-existing disabilities—the Twice-Exceptional. The emphasis on below-grade-level (or lower) performance, without regard to ability or potential weaknesses, misses twice-exceptional students. Those who perform at grade level, by using advanced conceptual abilities and hard work to compensate, may still require interventions and accommodations to manage increasing educational demands. Otherwise, college and even high school graduation may be out of reach. This article reviews changing laws and policies, explores case studies of twice-exceptional students missed, and examines the diagnosis of twice-exceptionality through comprehensive assessment. Appropriate best practices for the identification of twice-exceptional learners, maintenance of their civil rights, and provision of FAPE are offered for educators, parents, advocates, and legislators as federal, state, and district laws/policies evolve.

Keywords

gifted studies, special education, education, social sciences, learning disabilities, educational psychology, applied psychology, psychology, educational measurement & assessment, assessment, clinical psychology, law and courts, legal studies, political science

Introduction

It has become apparent that current school policies may contribute to the underidentification for specialized educational services of gifted children with co-existing disabilities—the Twice-Exceptional. This article reviews identification procedures supported by research and compares them with current policies to locate students with disabilities. Case studies of gifted students with different types of disabilities are examined to determine why they were overlooked by schools, and the long-term ramifications of missing them.

The failure to identify gifted students with disabilities has civil rights and legal implications. Appropriate best practices for the identification of twice-exceptional learners are recommended. This article is meant to inform and guide the broader education community, parents, advocates, psychologists, researchers concerned with disabilities in high functioning children, and legislators as federal, state, and district laws and policies evolve.

Background

A recent review of 20 years of research on gifted children with specific learning disabilities (SLDs), attention deficit

hyperactivity disorder (ADHD), and autism spectrum disorder (ASD) (Foley Nicpon, Allmon, Sieck, & Stinson, 2011) strongly suggests that gifted students *can* have co-existing

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disabilities, but identifying such students remains a challenge. “First, a comprehensive individualized evaluation that employs an intra-individual, rather than an interindividual approach toward ability and achievement analysis is critical” (Foley Nicpon et al., 2011, p. 7) to understand the relative strengths and weaknesses of gifted students with learning disabilities. Furthermore, achievement and ability tests must be accompanied by a variety of other developmental, performance, psychometric, and sociometric measures.

Silverman (1998) also recommends that diagnosticians use an “intrapersonal” rather than “normative” approach in analyzing test results to identify twice-exceptional children (p. 209). Instead of comparing a child’s scores to the scores of average children, she suggests that clinicians interpret the discrepancy between the twice-exceptional child’s strengths and weaknesses, and the degree to which relative weaknesses frustrate the full development of the child’s abilities (Silverman, 1998, 2002, 2003).

Students experiencing SLDs and other disabilities in school have legal rights of access to comprehensive assessment by school psychologists and other specialists. However, the Individuals with Disabilities Education Improvement Act of 2004 (IDEA, 2004) has been widely interpreted as restricting open access to comprehensive assessments by establishing a new introductory step in the qualification process for special education services. Under current federal law, students are first exposed to a process of ongoing learning assessment by classroom teachers. Children performing *below grade level* (i.e., below average) are located and provided tiered interventions of increasing magnitude to alleviate performance delays—a process commonly called *Response to Intervention* or *RTI*. Students who fail to improve to grade level, in the critical areas of oral expression, listening comprehension, written expression, basic reading skills, reading fluency skills, reading comprehension, mathematics calculation, and mathematics problem solving are then referred for special education. Yet, Silverman (2003) notes that gifted students with learning disabilities frequently perform at average or higher levels by using advanced reasoning to compensate for deficits. Foley Nicpon and her colleagues (2011) conclude that this new focus on curriculum-based assessment could lead to fewer referrals for services for those students who are performing average or above in a given academic area, despite the relative discrepancy between this performance and their cognitive abilities.

According to a series of clarifications issued by the U.S. Department of Education, “an RTI process does not replace the need for a comprehensive evaluation” (U.S. Department of Education, 2007), nor can it be used “to delay or deny the provision of a full and individual evaluation” (Musgrove, 2011, p. 2). However, states have not done enough to ensure comprehensive assessment is available when needed. Students not located by RTI should have access to comprehensive assessment if requested by parents, but some states withhold such assessment or seek to redefine it in a less than

comprehensive manner. Colorado’s “Full and Individual Evaluation” is described as “more focused on the specific areas of suspected disability than in the past—when a comprehensive evaluation typically meant a common and extensive battery of assessments given to all students referred . . . ” (Colorado Department of Education, Exceptional Student Services Unit, 2012, p. 1). Yet, focused or targeted assessment increases the chance that giftedness or a co-existing disability will be missed, especially if parents are asked to state the specific area of disability to be assessed. Some weaknesses have overlapping symptoms (e.g., auditory processing and attentional disorders); teasing them apart requires evaluating each possibility to learn which to rule out or address. Moreover, examiners who are severely limited in the scope of their assessment are less likely to confirm the combinations of weaknesses so many twice-exceptional children exhibit. Although IDEA 2004 describes in detail the broad and detailed characteristics of comprehensive assessment (Assistance to states, 2006, pp. 46642-46643), some educators believe RTI teams should be able to redefine comprehensive assessment, as desired, for a given student (e.g., four performance assessments alone may be sufficient). Such approaches, which may or may not comply with federal legislation, undermine a gifted child’s access to the comprehensive assessment needed to diagnose disabilities, and to the specialists with the diagnostic training to identify them. Contributing to this problem, some states have further scaled back services for SLDs, allowing only students performing at or below designated levels to qualify for special education services for SLDs. For example, Colorado views performance at the 12th percentile or below in an area (1½ standard deviations below the mean) as representing a significant deficit (Colorado Department of Education, Exceptional Student Services Unit, 2012, p. 3). Colorado utilizes a gap analysis formula, allowing services only for children considerably below grade level and making inadequate progress to catch up within a reasonable time. Educators report that a child is typically considered ineligible for services for SLDs if he or she can catch up within 3 years without them. Because such rules pay no heed to a child’s abilities and reasonable expectations for his or her progress, they disproportionately exclude twice-exceptional children from needed services. For students who barely qualify, interventions may be terminated as soon as performance improves beyond designated low levels. When comprehensive assessment is done, such rules may undermine accurate interpretation by school psychologists and confuse parents if diagnoses are skewed to reflect only the most extreme weaknesses considered *disabilities* by the state.

Other states appear to be more supportive of twice-exceptional students, but with critical limitations. Minnesota allows two ways to qualify for services—through 5th percentile or below performance *or* a 1.75 standard deviation discrepancy (Weinberg, v./Minnesota Department of Education, 2009). Although such a discrepancy between

ability and a major area of achievement would seem to qualify some twice-exceptional children using the Minnesota Regression Table, the following disclaimer is offered:

Students with exceptionally high abilities may very well exhibit intra-individual discrepancies. A discrepancy between achievement and aptitude must be put in the context of grade-level expectations. If the student is performing within what is expected of his/her age or state approved grade-level standards, a determination of SLD may not be appropriate. There is no legal obligation to provide specialized services for a student performing within grade-level. (Weinberg, v./Minnesota Department of Education, 2009, p. 45)

Finally, although IDEA 2004 defines the RTI process as a means of locating students with academic performance delays (at risk for SLDs), some states and school districts have broadened RTI team responsibilities to include the determination of service eligibility for students with ADHD, autistic spectrum disorder, and other disabilities/disorders. As such disabilities are less related to academic performance and appropriately diagnosed only by specialists, the merits of using RTI to determine eligibility and guide services for such students are questionable. In fact, emphasis on use of the RTI process can significantly delay identification of ASDs at a time when early intervention is important (Hammond, Campbell, & Ruble, 2013).

Free, Appropriate Public Education (FAPE)

By federal law, all children with disabilities are entitled to FAPE. IDEA 2004 specifies that FAPE “emphasizes special education and related services designed to meet their [i.e., children with disabilities] unique needs and prepare them for further education, employment, and independent living” (p. 26510). The provision of FAPE requires schools to meet procedural and substantive requirements, commencing after formal application for special education services is made by parents. Procedural requirements address the timely and appropriate response to a formal application by parents, while substantive requirements refer to provisions in an Individualized Education Program (IEP) that are reasonably calculated to confer educational benefit. Parents unaware of a disability because it has been missed by low-performance-based regulations are less likely to apply for accommodations and navigate the special education system successfully. Such issues can undermine the provision of FAPE for gifted children with disabilities.

Grade-level performance should not be construed by teachers or parents to mean that the child already has an education with reasonable benefit and requires neither services nor assessment. As average performance in a major learning area is a red flag for SLDs with learning disabled/gifted students, further investigation is needed. If an SLD is confirmed

through comprehensive assessment and an IEP is developed, a reasonable educational benefit would be to see achievement rise in the area of SLD to better approximate what would be commensurate with ability.

Viewing these issues as a whole, the provision of FAPE for twice-exceptional students cannot be assured if changing definitions of disability and limited access to comprehensive assessment disproportionately eliminate high ability students from consideration. FAPE cannot be guaranteed for twice-exceptional students if fiscal limitations, in the wake of a recession, motivate states to limit costly assessment and services to the extent that the civil rights of some students are compromised. This article addresses a concerning movement away from support of twice-exceptional children as federal, state, and local regulations evolve. Attention to this issue is needed now to correct misconceptions about disabilities in high-ability individuals, inform decision makers, shape emerging legislation, and preserve critical supports for twice-exceptional students.

Discussion

Changes in IDEA

IDEA 2004 reflects a change in policy from the 1997, 1999 reauthorization of the IDEA (Individuals with Disabilities Education Act [IDEA] 1997, 1999), in which children with SLDs were identified through comprehensive individual assessment of ability, achievement, and all areas of potential weakness by qualified professionals (34 C.F.R. 533). These data were gathered to interpret whether a child’s academic achievement met reasonable expectations, considering his or her developmental and educational experience. The use of ability–achievement discrepancies for the identification of children with learning disabilities was an important criterion for detecting SLDs under IDEA 1999 (34 C.F.R. 541, 543). If the child’s achievement failed to approach his or her ability, and was progressing atypically, this was a possible indication of a learning disability. Utilizing additional evaluation in all areas of potential weakness helped to rule out other causes for the child’s lower-than-expected performance (e.g., limited access to quality instruction, family stressors, language diversity, etc.). Moreover, it helped to identify processing weaknesses and other deficits likely to accompany learning disabilities (e.g., sensory, visual, and auditory processing weaknesses; social skills deficits; executive functioning problems; etc.). Through the comprehensive assessment process, gifted children who performed at the average level in areas of disability, well below expectations for their ability, were frequently identified and provided services for learning disabilities under IDEA 1999; today, these children may not be considered for services under IDEA 2004 as interpreted by states.

Although IDEA 2004 continues to allow a pattern of strengths and weaknesses to be used as an indicator of

learning disability, it mandates that the criteria adopted by each state “must not require the use of a severe discrepancy between intellectual ability and achievement for determining whether a child has a specific learning disability” (Assistance to states, 2006, p. 46647). The 2004 legislation places the primary responsibility for diagnosing SLDs in the hands of teachers, based on multiple classroom achievement measures. Such curriculum-based assessment avoids comprehensive assessments by school psychologists and other specialists, and conserves financial resources. However, for a twice-exceptional child’s *average* performance to alert teachers, the student’s complex patterns of strengths and weaknesses must be evident and appreciated by the teacher. The chance that twice-exceptional children will be missed increases with excessive demands on teacher time and inadequate education in observable twice-exceptional characteristics.

The ramifications of overlooking a twice-exceptional child are significant. Once missed for special education services, the child is less likely to be identified later, and a promising educational trajectory may be compromised. Students needing classroom or testing accommodations through a 504 Plan are less likely to get them. Without a history of accommodations for a problem, accommodations for later standardized tests (e.g., College Board exams) become inaccessible. The termination of periodic comprehensive assessment for high school students may make essential college accommodations inaccessible because most colleges require assessment within 3 years of college entrance to grant them, even if the student has a history of special education services (an IEP or 504 Plan) or accommodations. Unidentified twice-exceptional students have no access to the supports that might prevent or mitigate course failures in high school, and may be pushed out of school when failed coursework cannot be fully made up by taking remedial summer courses.

RTI and Gifted Students

RTI, a regular education initiative, was designed to address a variety of student performance difficulties without waiting for a child to show the requisite ability-achievement discrepancy to qualify for special education. Under RTI, teams of teachers identify children performing below grade level and apply scientifically based interventions—without first “waiting for a child to fail.” Thus, interventions can be applied quickly, beginning in the classroom and discontinued once a student meets grade-level expectations.

RTI was not developed with gifted children in mind, and adaptation of its rules for gifted children was overlooked in the federal legislation. Classroom teachers can voluntarily raise achievement benchmarks and initiate RTI interventions for a gifted but average-performing child. However, such children often present a confusing picture and go unrecognized. Intellectual advancement may hide significant

disability, disability may conceal giftedness, or the child’s strengths and weaknesses may appear average when combined (Silverman, 2009). Assessments commonly available to teachers provide no easy answers, and teachers rarely have access to comprehensive testing results. Achievement test scores among twice-exceptional children cannot be expected to be as low as those of learning disabled children who are not gifted. States that require twice-exceptional students to qualify separately as “gifted” and as “LD” introduce a double hurdle for such students to overcome to receive services (Brody & Mills, 1997). The identification process is made more problematic when state criteria for giftedness and learning-disability services do not consider the possible co-existence of these exceptionalities. Foley Nicpon and her colleagues (2011) caution that students’ disabilities could affect their ability testing performance, and thus, they may not meet gifted criteria. McKenzie (2010) goes further, observing the potentially reciprocal “masking” effects that giftedness and learning disability have on each other, affecting student capacities to satisfy eligibility requirements for either or both exceptionalities (p. 164).

Efforts have been made to expand RTI to address the needs of low-performing and high-performing students. The assumption is that if an RTI team can identify struggling students and initiate interventions in the regular classroom, it can also locate and serve gifted students needing advanced instruction (Choice & Walker, 2010). RTI used in this way might enable gifted education to transition from a largely supplementary service to the regular classroom. When used for twice-exceptional students, RTI could potentially address strengths and weaknesses within the same environment.

Colorado has embraced this approach, defining RTI as “a framework that promotes a well-integrated system connecting general, compensatory, gifted, and special education in providing high quality, standards-based instruction and intervention that is matched to students’ academic, social-emotional, and behavioral needs” (Colorado Department of Education, 2008, p. 3). Given Colorado’s narrow interpretation of eligibility for special education services for SLDs, this broad conceptualization of RTI could fill the gap. Yet, private examiners of the gifted report dramatic increases in unidentified twice-exceptional students brought for testing in Colorado since 2008. Many parents describe sharing concerns with a child’s teacher(s), only to be told that the student is fine. Some parents report being chastised by teachers for having expectations that are too lofty and not appreciating their “average” child.

The predicament is that RTI’s legal mandate extends only to children who perform below grade level. Teachers who recognize and appreciate a twice-exceptional student’s needs may voluntarily provide RTI interventions, but considerable time is required for planning, monitoring, and paperwork. If twice-exceptional students who perform at grade level are missed through RTI, parents have no right to due process. Because few students become eligible for special education

services without first being located through RTI, their access to FAPE may be compromised.

The current mandated RTI approaches to address weaknesses should at least be adapted for use with students of higher ability to prevent inequities. Reynolds (1984-1985) writes:

Some states exclude children who do not score below grade level, regardless of any discrepancy between IQ, expected achievement level, and obtained achievement level, regardless of the type of mathematical model applied. Any such exclusionary model will result in the systematic denial of services to children with IQs above 100 with the higher the IQ the more likely the denial of services. Yet, these are most likely to be the ones able to benefit most from services for the learning disabled. (p. 457)

In utilizing RTI approaches, McKenzie (2010) advises teachers to look beyond whether a student is *responsive* (R) or *nonresponsive* (NR) to instructional interventions because SLD produces “unexpected low achievement” that cannot be derived by an absolute one-dimensional indicator, such as the level of academic achievement alone:

The *absolute* nature of the low-achievement markers designed to distinguish between NR and R in RTI must not be used to determine the *relative* underachievement that is characteristic of SLD, and particularly among G/LD [Gifted/Learning Disabled] students. In that spirit, teachers who suspect that a student may be G/LD must not automatically doubt their judgment merely because the student was determined to be R in class-wide testing. (McKenzie, 2010, p. 166)

McKenzie (2010) concludes that the insufficiency of RTI alone with twice-exceptional students is producing a growing educational consensus on the complementary need for comprehensive psychometric assessments.

Symptoms of Learning Disabilities in the Gifted

Are gifted children who perform at average levels truly disabled? While twice-exceptional students may achieve at average academic levels due to strong compensatory strategies, they exhibit learning patterns common to disabled children. For example, such students may be conceptually advanced but struggle with basic skills, show high verbal ability but extreme difficulty in written language, demonstrate high levels of retention for lecture material while struggling with reading, etc. The capacity of twice-exceptional students to compensate for an SLD appears increasingly challenged with development, as the pace of instruction accelerates and large-group instruction becomes predominant (McKenzie, 2010).

In assessment terms, we would expect to see a clinically large discrepancy in test scores between reasoning ability and processing skills, reasoning ability and achievement in

the area of learning disability (e.g., reading), as well as discrepancies between reading and other areas of learning (oral language, writing, math). Discrepancies of 1 to 1½ standard deviations (usually 15-23 composite score points) suggest problems. The greater the discrepancy between the observed reading problem and competence in one or more of the listed abilities, the more likely the disability is caused by intrinsic factors. The learning disability reflects a significant departure from the child’s progress in other areas. It is resistant to intervention (most disabilities are lifelong), although gifted children respond more quickly to interventions than less advanced children, and later accommodations may be minor.

The gifted child with a reading disability (dyslexia) may exhibit some or all of the following: problems retaining sound/symbol relationships (phonics), word spellings, or math facts in long-term memory; visual perceptual/directional weaknesses (i.e., letter or word reversals, confusion with visual patterns, a tendency to get lost); sensory, visual, or auditory processing weaknesses; mathematics disability (calculation difficulties, while math reasoning may be intact); and problems with written expression (sequencing words into sentences and thoughts onto paper). Small words may be omitted when reading or words substituted while maintaining context. Thus, twice-exceptional students frequently require substantial extra time to *process* when completing classroom activities or homework (VanTassel-Baska, 2012), fatigue easily due to compensation demands, require unusual parent support just to keep up with their classes, and need therapeutic interventions (e.g., reading interventions, occupational therapy, vision therapy, etc.) to prevent years of academic struggle. Despite basic skills that appear typical for grade, such skills are insufficient to support the higher-level, rapid learning typical of gifted students.

Example: Student A. Age 8-5, gifted verbal and visual intelligence; Reading Disability (dyslexia); Disorder of Written Expression; sensory, auditory, and visual processing weaknesses; some executive functioning issues

Student A was fortunate to be recognized as gifted early in school due to her advanced math abilities. She grasped elementary math concepts in preschool and had always enjoyed math. However, A increasingly felt “different” because her reading-related academic abilities set her apart from others. She hated reading, struggled with comprehension, and was unable to participate in enrichment activities due to her weakness in reading. Sensory issues common to dyslexia further challenged A. She put her hands over her ears to avoid loud sounds, struggled with reversals, and misunderstood directions. She found it difficult to focus in a noisy classroom, yet her teacher did not view her as inattentive. Central Auditory Processing Disorder was later diagnosed, despite normal auditory acuity. Magnifying lenses and vision therapy were prescribed for visual processing issues that affected her reading and writing. Student A disliked homework because it took her so long to complete, and was

Table 1. Student A's Wechsler Intelligence Scale for Children-Fourth Edition (WISC-IV).

Composite/Index	Standard score	Percentile	Range
Verbal Comprehension	130	98	Very superior ("Gifted")
Perceptual Reasoning	133	99	Gifted
Working Memory	113	81	High average
Processing Speed	88	21	Low average
General Ability Index	138	99	Gifted

embarrassed in class when she was the slowest to finish. Her mother wrote that although A loved learning math, "We no longer work on math; there is simply not enough time so her math skills are 'rusty.'"

Tested on the Wechsler Intelligence Scale for Children-Fourth Edition (WISC-IV), A's Verbal Comprehension Composite of 130 confirmed "very superior" or gifted abstract verbal reasoning and language abilities, and the likelihood of success in a full-time gifted classroom. Perceptual (visual) Reasoning (133) documented gifted visual-spatial strengths and pattern recognition. Not surprisingly, (auditory) Working Memory (113) scored lower, while Processing Speed on paper-and-pencil tasks was low average (88). Student A earned the following Composite scores on the WISC-IV (see Table 1).

Student A was administered 10 individual WISC-IV subtests, which yield scaled scores from the test manual of 1-19. A's subtest scaled scores varied from 19 (99.9th percentile) to 6 (9th percentile), a significant discrepancy of over 4 standard deviations, suggestive of a learning disability. Specific weaknesses were noted in visual-motor speed, non-meaningful auditory memory, vocabulary, and visual perception.

On the Woodcock-Johnson III Tests of Achievement (WJ-III ACH), A's Brief Math (130) was commensurate with her ability. However, her reading/writing performance failed to approach her WISC-IV 130 Verbal Comprehension score as expected. Scores were 37 points lower (over 2 standard deviations; Table 2) in Brief Reading (93) and Brief Writing (93), the latter of which includes Spelling (88) and Writing Samples (103). Scores were as follows:

Student A's assessment strongly suggests SLDs, but when reading and writing skills are generally average, most schools will not view them as weaknesses requiring RTI services. Few of A's scores fall below average (below 90). If she can qualify for special education services based on a significant discrepancy between ability and achievement, with other evidence of a significant learning problem, an IEP could provide appropriate interventions and support. However, if her state bases eligibility solely on below-grade-level performance—regardless of ability—she will not qualify for either RTI or IDEA services. Even a 504 Plan, designed to provide classroom and testing accommodations, may be difficult to

Table 2. Student A's Woodcock-Johnson-III Tests of Achievement (WJ-III ACH).

Area	Standard score	Percentile	Level
Brief Reading	93	31	Average
Brief Math	130	98	Superior
Brief Writing	93	33	Average

obtain if the student's school believes there is no disability requiring accommodation.

Yet, this third grader's performance is far below that of a typical gifted student. Reversals were evident in reading and spelling (e.g., "baby bird" was spelled "dady drbe") and she missed some sounds altogether. She labored reading passages, frequently adding words and guessing. Unlike an average student, she repeatedly mentioned her struggle with reading, writing, and spelling, and her feelings when she got a bad grade. Student A reported spending at least one full day of every weekend on homework; otherwise, she would lose sleep each night working. She added, "If no one helps me in reading it will take me 24 hours!"

Student A most needs support for her strengths in school, including advancement in math. However, assessment also documented the need for an IEP to provide immediate reading/writing interventions and accommodations to manage her workload and ensure success. Accommodations are also needed to address auditory, visual, and sensory processing weaknesses and some executive functioning issues. Student A is in peril if she fails to qualify for services through either RTI or IDEA based solely on her grade-level performance. Already struggling with her workload in the third grade, she can anticipate that the reading/writing demands of her education will only increase.

The *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (American Psychiatric Association, 1994) notes, "Particularly when Reading Disorder is associated with high IQ, the child may function at or near grade level in the early grades, and the Reading Disorder may not be fully apparent until the fourth grade or later" (p. 49). Yet, early reading intervention is key to preventing learning problems in all subjects and a potential loss of motivation to learn, especially if the child's veiled struggle is interpreted as laziness. Student A exhibits a far larger strength-weakness discrepancy than was required for any child under IDEA 1999; current regulations apply an inequitable standard of proof of disability for twice-exceptional learners. Reynolds and Shaywitz (2009) write:

IQ is relevant, both in consideration of the RTI process and in the diagnosis of LD A bright student might be functioning below his or her capability but at an absolute level comparable to the class average of his or her less able peers. That struggling reader . . . would be entirely invisible and overlooked in such an RTI process. In fact, often, the only way such struggling readers

Table 3. Student B's Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV).

Composite/Index	Standard score	Percentile	Range
Verbal Comprehension	141	99.7	Gifted
Perceptual Organization	105	63	Average
Working Memory	95	37	Average
Processing Speed	86	18	Low average

are identified is through a complete, comprehensive assessment in which cognitive abilities and psychological processes are evaluated. (p. 136)

Example: Student B. Age 16-1. Gifted verbal intelligence, Reading Disorder, Mathematics Disorder, visual and central auditory processing weaknesses, suicidal ideation

Student B received no comprehensive assessment until age 16 when his parents requested a private evaluation. His mother noted, "We know he is smart. Why does he struggle in a traditional school environment?" B's educational needs were reasonably met at his small K-8 school; however, performance at his competitive high school had been "a nightmare." B had earned *F*s for four semesters, and making up failed work was becoming impossible. He had earned three *F*s just in the semester prior to assessment and was required to take summer school. However, only two classes could be made up the following summer and B was again failing. B's mother reported that for 2 years she had asked the school to test B; however, school personnel saw no need. B had been designated as "gifted in art and leadership," so educators thought his academic problems were due to laziness. Recently, when B's mother requested testing again, she was told, "We don't do that anymore."

On the Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV), B earned the following Composite scores:

The WAIS-IV documented B's gifted verbal reasoning ability and low average processing speed. Central Auditory Processing Disorder and visual processing weaknesses were subsequently confirmed by specialists, explaining his lower Perceptual Reasoning and Working Memory scores. Composite scores varied by 55 points (between 3 and 4 standard deviations; Table 3). Subtest scores ranged from the 99.9th percentile to the 9th percentile, a pattern typically seen in individuals with learning disabilities.

WJ-III achievement scores ranged from the 75th to the 1st percentile. B's standard scores in the following table fall well below his WAIS-IV Verbal Comprehension Composite of 141 (see Table 4), which should predict success in advanced classes. Note how few scores fall below 90 and might not be detected by "below average" markers of disability.

B's scores on timed tests of simple reading, math facts, and writing (i.e., academic fluency) were consistent with processing weaknesses. Math Fluency yielded a score of 67 (1st percentile, third grade level). B revealed that he never

Table 4. Student B's Woodcock Johnson-III Tests of Achievement (WJ-III ACH).

Area assessed	Standard score	Percentile	Grade equivalent	Range
Letter-word	96	40	9.5	Average
Passage Comprehension	110	75	>18.0	Average
Reading Fluency	101	54	11.2	Average
Word Attack	88	21	4.5	Low average
Broad Reading	102	56	11.4	Average
Calculation	101	51	11.0	Average
Applied Problems	101	54	11.4	Average
Math Fluency	67	1	3.9	Low
Broad Math	94	33	8.6	Average
Spelling	85	15	5.9	Low average
Writing Samples	103	59	13.0	Average
Writing Fluency	92	29	7.6	Average
Broad Written Language	90	26	7.5	Low average

learned the multiplication tables. Although Broad Math was average, there were holes in his knowledge of arithmetic operations. Broad Reading was average, but nonsense word reading (Word Attack) was low average (fourth grade level), suggesting a reading disability (dyslexia). B admitted he never learned to sound out words. Spelling was low average, at the fifth grade level. Writing Samples showed writing weaknesses combined with the interesting content expected of a gifted student.

Inattention to B's deficits undermined his ability to succeed in a competitive academic environment consistent with his giftedness, and threatened his self-esteem. He managed to compensate well enough in the early grades due to strong reasoning ability, but his untreated deficits sabotaged his success as school demands increased. B attended the posttest conference and was relieved to find real reasons for his failures beyond laziness, and interventions likely to help. His mother reported that he said upon leaving, "Drive carefully. We finally have a reason to live."

Foley Nicpon and her associates (2011) report that twice-exceptional students can have internalized feelings of failure, depression, low self-efficacy, and worthlessness, along with externalizing behaviors such as aggression and hyperactivity. This negative emotionality is not surprising, given the students' frequent negative school experiences and interactions, but is "particularly disheartening because these students were found to have a great capacity for motivation and confidence" (p. 7).

B's private testing failed to solve the problem. His state had instituted an additional low performance requirement to ensure eligible students were well below grade level; thus, he was considered ineligible for IDEA services and an IEP. He was offered a 504 Plan with some of the accommodations suggested by the specialists he had seen. However, he was

Table 5. Student C's Wechsler Intelligence Scale for Children-Fourth Edition (WISC-IV) 2004.

Composite/Index	Standard score	Percentile	Level
Verbal Comprehension	134	99	Gifted
Perceptual Reasoning	117	87	High average
Working Memory	107	68	Average
Processing Speed	88	21	Low average
Full Scale IQ	119	90	High average
General Ability Index (GAI)	129	97	Superior

provided no way to make up his failing classes or to take fewer classes per semester to finish. Teachers wanted to help, but felt their hands were tied. Without an IEP or sufficient accommodations to prevent failure, he was forced out of school. Because B's parents were never advised of their right to formally request comprehensive assessment, they did not do so in writing. They were unaware of their right to due process if such assessment is refused. Therefore, it is unclear whether his school could even have been held accountable for procedural errors. This case represents a clear failure to ensure FAPE.

Gifted Children With Other Disabilities (ADHD, Autistic Spectrum Disorder, etc.)

IDEA 2004 utilizes RTI as a first and primary step in identifying and addressing SLDs. However, some schools have expanded its scope to include children with other disorders, such as ASD and ADHD, and have denied students accommodations because they do not appear to teachers to be "impaired enough." Many of these children suffer from anxiety, being overwhelmed by stimuli, and inability to focus. Comprehensive assessment by specialists is essential for such diagnoses, and invaluable to guide interventions and accommodations in school. Not all disabilities should be viewed as if they were learning disabilities in the specific areas of reading, writing, and math. Deirdre Lovecky (2004), clinical psychologist and author of *Different Minds: Gifted Children With ADHD, Asperger Syndrome, and Other Deficits* notes that gifted students with disabilities need intervention for a variety of problems in the early years, and continuing, even if they score above grade level. Children with ADHD will need accommodations and remediation of executive function deficits, including writing skills. Otherwise, as work becomes more complex and they have to juggle more parameters at once, they start to fail. Children with ASD need help with executive functions, processing speed, written expression, and social/emotional deficits. If these twice-exceptional children are not given appropriate remediations because they score too high on academics, then they are being deprived of the chance for a productive adult life. (D. Lovecky, personal communication, November 20, 2010)

Table 6. Student C's Wechsler Intelligence Scale for Children-Fourth Edition (WISC-IV) 2007.

Composite/Index	Standard score	Percentile	Level
Verbal Comprehension	138	99	Gifted
Perceptual Reasoning	102	55	Average
Working Memory	97	42	Average
Processing Speed	80	9	Low average
Full Scale IQ	109	73	Average
GAI	123	94	Superior

Note. GAI = General Ability Index.

Example: Student C. Tested at age 7-1 and age 10. ADHD, Nonverbal Learning Disability

Student C was tested privately in the first grade (2004), after services were initially denied by her school, and again in the fourth grade (2007). Both evaluations showed strong evidence of giftedness, ADHD and Nonverbal Learning Disability, with a pattern of increasing score discrepancies between gifted WISC-IV Verbal Comprehension scores and declining scores in areas of weakness.

Student C's 2004 WISC-IV yielded a discrepancy of 46 points (over 3 standard deviations; Table 5). Her 2007 WISC-IV yielded a discrepancy of 58 points (60 points is 4 standard deviations; Table 6). C's Full Scale IQ scores for 2004 (119) and 2007 (109) offer no indication of her twice-exceptionality. General Ability Index (GAI) scores for 2004 (129) and 2007 (123) offer a somewhat better estimate of reasoning strengths, but the full profile is needed to understand her strengths and weaknesses.

While WJ-III ACH Broad Reading was consistent from 2004 to 2007 (130, 129), Broad Math declined from 116 to 98 (in relation to age peers), largely due to untimed Calculation skills, which dropped from 108 (average, 70th percentile) to 78 (low, 7th percentile). Broad Written Language declined from 126 (superior, 96th percentile) to 106 (average, 66th percentile). The Beery-Buktenica Visual-Motor Integration Test yielded a 2004 score of 97 (average, 42nd percentile) and 2007 score of 86 (low average, 18th percentile). Student C's scores on executive function tests, visual perception, and visual motor tests were much lower on the second testing, often well below average.

Student C struggled to pass her subjects. What was unfinished in school was sent home to complete in addition to homework. C's mother spent every evening, including weekends, working with C to complete work. C needed significant help interpreting directions, organizing her thoughts, and composing written work. She labored to complete math problems. She had difficulty breaking apart questions and figuring out what was wanted. She did not know how to solve a slightly different problem than the one presented in class. Though she had good ideas for stories and essays, she had difficulty organizing her thoughts and writing with

Table 7. Student D's Wechsler Intelligence Scale for Children-Fourth Edition (WISC-IV).

Composite/Index	Standard score	Percentile	Level
Verbal Comprehension	132	98	Gifted
Perceptual Reasoning	131	98	Gifted
Working Memory	113	81	High average
Processing Speed	83	13	Low average
Full Scale IQ	NA		
GAI	138	99	Gifted

Note. NA = not applicable; GAI = General Ability Index.

excessively slow handwriting. To compensate, C's mother had her dictate material and then recopy it. Homework was an exhausting process. Student C, a girl who loved to read, enjoyed outdoor activities such as gardening, and loved singing and music, had little time to pursue any of her interests.

Despite the 2007 scores, which showed a decrease in general performance over the three-year time span indicative of unmet needs, the school system denied any services because Student C was passing everything. The school did not take into account her incomplete classwork, poor grades in math, or C's excessively slow work speed. Even though she was unable to complete classwork within a time frame sufficient for the average student, her school did not see evidence of a disability. Given the option of continuing the nightly homework support or discontinuing it and allowing C to fail, her mother, a single mom, took her out of school and home-schooled her through 8th grade. At that point, they moved to another subsidized house in another town and the new school system was more responsive in providing an IEP. Student C is now in 10th grade in the new school. Even with the IEP, C needs homework support; however, she is now more successful. Student C demonstrates not only how passing performance can hide patterns of weakness, but also the essential need to ensure FAPE for children of limited means and no possibility of private schools.

Example: Student D. Age 10, gifted, Asperger Syndrome and ADHD-Combined Type; anxiety and depression.

Student D is a gifted 10-year-old, fourth-grade boy. He earned the following Composite scores on the WISC-IV: Verbal Comprehension-132, Perceptual Reasoning-131, Working Memory-113, and Processing Speed-83 (see Table 7). The Full Scale IQ was not calculated due to the 49-point difference between highest and lowest Composite scores. Instead, the GAI (which summarizes the Verbal Comprehension and Perceptual Reasoning scores) was used. D's GAI of 138 (99th percentile) indicates intellectual potential within the gifted range. In contrast, his Processing Speed score of 83 (13th percentile, low average range) suggests relatively impaired fine-motor processing and handwriting speed.

D had been having a behavior problem in school. He had difficulty remaining in his seat, instead wandering around the room. He blurted out answers and told the teacher she was wrong about information she was giving the class. D bothered other students, poking, pinching, hitting them, and intruding into their personal space. He had several full-scale meltdowns a week in class when he became upset. Instead of doing his written classwork, he spent his time daydreaming and making up stories of his imagined superhero. Yet, D participated in class discussions, offered to help other students, and passed the state standardized testing at the "with distinction" level in all areas.

When D moved to his current school in Grade 3, his behavior and social skill problems were readily apparent from the first day. His school was concerned, but thought that he did not need special services since he was doing so well academically. The behavior and social issues were targeted by RTI with a behavior plan. Because there was no formal assessment made, the diagnosis of Asperger Syndrome was missed. Thus, the behavior plan treated D as if he had a choice about his behaviors. The plan called for all students to receive tickets. Those who had fewer than two warnings during the day were able to keep them and receive a reward at the end of the week. D lost his ticket by noon every day, increasing his meltdowns; he was frequently removed from the room screaming and crying.

At the end of third grade, his private therapist gave him the Asperger diagnosis. D qualified based on checklists, parent interview, and several interviews in which he was asked to identify feelings, discuss other's perspectives and the idea of empathy, all of which D could not do. A letter was submitted to the school outlining D's issues and making recommendations for an IEP as well as specific strategies that should be used to help D. This included a one-on-one aide, help with transitions and dealing with the unexpected, help with executive function deficits and writing, as well as the need for academic stimulation. The school's response was to give D a 504 plan for Grade 4.

The 504 plan was only marginally successful. Though D was calmer, he still had extensive classroom difficulty completing work, dealing with the unexpected, and negotiating social situations. He did decrease the number of times he blurted out questions and answers. With the aide present, he was able to reduce the number of meltdowns slightly. However, his school did not fully understand his needs. Socially, he was not functioning at all. One child told his parents that he did not want to be near D because he was afraid D would hurt him. When questioned about the specific incident, D had no idea that he had transgressed. By the end of the year, D felt that he was no good. He made comments that he wished he were dead, and became even more anxious. Finally, after several classroom incidents, the school decided he was eligible for an IEP for Grade 5.

It took 2 years for D to finally receive services he needed, including a full-time aide trained in the needs of children

with ASD, along with training of his teachers. Finally D has the services he needs, but he lost 2 years of his life during a time when intervention is extremely important. RTI only made matters worse; it provided only strategies, without a professional qualified to make an accurate diagnosis. FAPE requires that a child like D receive an appropriate education. The only way to accomplish that is for there to be an accurate diagnosis on which to base interventions.

Example: Student E. Law student, moderately to exceptionally gifted, Reading Disability, auditory processing issues, Mathematics Disability

In the elementary grades, E attended the learning-disabled track of a private school to address her significant dyslexia. Early IQ testing indicated average abilities due to weaknesses lowering scores. With interventions and supports, she was moved to the regular track of the same school for her middle-year education. With accommodations for extra time, books on tape, use of a calculator, emphasis on writing content, rather than spelling, she began to win academic awards, and demonstrate uncommon leadership and creativity. In subsequent testing, E's IQ scores rose with interventions. She earned gifted scores and, increasingly, presented as highly to exceptionally gifted. E attended a full-time gifted program within a public high school, where she benefited from continued accommodations and graduated with multiple honors. She distinguished herself in academics and became a powerful self-advocate, even winning a lawsuit against a high profile university that refused her accommodations for entrance tests. E went on to college, graduating with distinction, and is now flourishing in law school.

E's history is notable for her success with sensible interventions and continued accommodations for lifelong challenges, combined with support for her giftedness. Armed with assistive technologies (i.e., a Dragon Naturally Speaking voice-activated word processor and Kurzweil optical text reader that offers multi-sensory help to read complex texts) and double time for tests, she can reasonably demonstrate the full extent of her knowledge. However, if she were a young child now in states requiring performance at very low levels, she would either be denied services altogether or provided services only for the brief time required to progress beyond a low absolute performance requirement. Under such circumstances, E's story would more likely have reflected Student B's experience, with increasing failure as educational demands increased.

Comprehensive Assessment: A Legal Mandate

Access to comprehensive assessment must be preserved to explore and clarify needs that are unclear or missed in the classroom. According to federal law, test score discrepancies can still be used but are not *required*. The following final

rules on the implementation of IDEA 2004 from the *Federal Register* (Assistance to states, 2006) discuss and resolve several issues associated with twice-exceptional students. (The "comment" raises the question and the "discussion" delivers the official answer from the Department of Education.):

Comment: Many commenters stated that the elimination of discrepancy models would result in an inability to identify children with SLD [Specific Learning Disability] who are gifted. One commenter stated that a scatter of scores should be used to identify children with SLD who are gifted.

Discussion: Discrepancy models are not essential for identifying children with SLD who are gifted. However, the regulations clearly allow discrepancies in achievement domains, typical of children with SLD who are gifted, to be used to identify children with SLD. (p. 46647)

Comment: Several commenters stated that intra-individual differences, particularly in cognitive functions, are essential to identifying a child with an SLD and should be included in the eligibility criteria in § 300.309.

Discussion: As indicated above, as assessment of intra-individual differences in cognitive functions does not contribute to identification and intervention decisions for children suspected of having an SLD. The regulations, however, allow for the assessment of intra-individual differences in achievement as part of an identification model for SLD. The regulations also allow for the assessment of discrepancies in intellectual development and achievement. (p. 46651)

The Learning Disabilities Association of America's White Paper on evaluation of SLDs (2010) concurs that an "... approach that identifies a pattern of psychological processing strengths and deficits, and achievement deficits consistent with this pattern of processing deficits, makes the most empirical and clinical sense: ..." (p. 2). Such an approach separates children with SLDs from those who simply have learning delays. LDA concludes,

An empirically-validated RTI model could be used to prevent learning problems, but comprehensive evaluations should occur whenever necessary for SLD identification purposes, and children with SLD need individualized interventions based on specific learning needs, not merely more intense interventions designed for children in general education. (Learning Disabilities Association of America, 2010, p. 6)

While IDEA 2004 requires states to utilize RTI as *part* of the comprehensive evaluation process for determining SLDs, according to the Office of Special Education and Rehabilitative Services (OSERS) of the U.S. Department of Education (2007), *RTI cannot be permitted to constitute the entire process*. Since publication of the final regulations, OSERS published the following questions and answers in January 2007 to provide interpretive guidance:

Question C-6: May an eligibility determination be made using only information that was collected through an RTI process?

Answer: The Department provided additional clarification regarding this issue in the *Analysis of Comment and Changes* section of the regulations, page 46648. This section states, “an RTI process does not replace the need for a comprehensive evaluation. A public agency must use a variety of data gathering tools and strategies even if an RTI process is used” “The results of an RTI process may be one component of the information reviewed as part of the evaluation procedures . . . [but] an evaluation must include a variety of assessment tools and strategies and cannot rely on any single procedure as the sole criterion for determining eligibility for special education and related services.” (p. 46648)

States that have largely terminated their use of comprehensive individual assessment offer little else to provide a fair evaluation. Private assessment and therapeutic interventions may be a parent’s only choice to explore and address disabilities. If a child shows evidence of disability and the RTI process has failed to recognize it or provide successful interventions, the child has the right to a timely initial evaluation for special education services. It is reasonable to assume that this includes assessment by trained professionals outside the classroom. A recent memorandum from the United States Department of Education states:

It has come to the attention of the Office of Special Education Programs (OSEP) that, in some instances, local educational agencies (LEAs) may be using Response to Intervention (RTI) strategies to delay or deny a timely initial evaluation for children suspected of having a disability. States and LEAs have an obligation to ensure that evaluations of children suspected of having a disability are not delayed or denied because of implementation of an RTI strategy. (Musgrove, 2011, p. 1)

This timely evaluation should explore not only the area of suspected disability but also all areas related to the suspected disability, including, if appropriate, health, vision, hearing, social and emotional status, general intelligence, academic performance, communicative status, and motor abilities. Information from parents is needed to understand the child’s current situation, as well as psychosocial, health, and developmental history. Such comprehensive assessment is needed to reveal the complex patterns of strengths and weaknesses that define twice-exceptionality, and document the need for special education services.

How might early comprehensive assessment have changed the life of Student B, who was forced out of high school? Such evaluation could have diagnosed B’s reading and mathematics disabilities in elementary school and prompted early reading intervention and related services. B believes he would have benefitted from some therapeutic learning situations (e.g., work with a reading therapist, resource room assistance). He might have flourished with

some advanced learning options (with accommodations), as well. Such services would have improved B’s skills prior to entering a competitive high school. Most importantly, careful monitoring of his course load could have kept B’s learning demands reasonable and avoided failure. With early therapeutic interventions, it is possible that limited accommodations for classroom learning or standardized testing would have been sufficient later. B would have benefitted from a word processor with spell check or voice-activated word processor for writing; audio books or a computer text reader for reading; use of a calculator; extra time, a keyboard, or a scribe for standardized tests and college board exams. Including specialist recommendations for visual or auditory weaknesses might have aided classroom learning. Such an approach would have prevented the devastating “too little too late” scenario that resulted. Student B could have been provided reasonable services to allow a highly capable student to complete high school successfully and go to college.

Instead, B did not qualify as having a disability due to reasoning such as the following (as seen on multiple state special education websites):

An individual student who has had a diagnosis of dyslexia may or may not be eligible for special education services—it is never an automatic conclusion that if a student is identified as having dyslexia, that student is also eligible for special education services The fact that the determination of the significance of an academic skill deficit is no longer based on a comparison between assessed achievement and assessed ability or intelligence has also caused some confusion. A significant academic skill deficit is now determined by comparing a child’s academic skill level to grade-level standards or norms. (Colorado Department of Education, Exceptional Student Services Unit, 2012, p. 7)

The question must be asked: Given the guarantee of a “FAPE,” is it ethical to redefine disability in a way that denies eligibility for special education services to children who cannot succeed in school without them? The first special education case heard by the Supreme Court, *Board of Educ. v. Rowley* (1982) addresses fundamental issues. It notes that special education law was largely enacted to provide students access to public education who had been previously excluded or were “sitting idly in regular classrooms awaiting the time when they were old enough to ‘drop out’” (p. 179). The Rowley case clarifies that special education does not guarantee any particular level of education once inside; yet, a child’s special education should at least provide “benefit.” It further states:

In addition, the IEP, and therefore the personalized instruction . . . should be reasonably calculated to enable the child to achieve passing marks and advance from grade to grade. (*Board of Educ. v. Rowley*, 1982, p. 204)

Student B was unable to achieve passing marks and advance from grade to grade without services. He was sitting (if not idly) in classrooms awaiting the time when he would be forced to leave high school due to failure. Similarly, many students such as Student A, B's younger counterpart, have unrecognized learning disabilities and no access to educational programs at their public schools that would provide "benefit" for their disabilities. Student C, whose performance declined over several years as her school denied services, demonstrates the total dependence of children without means on appropriate, free, public education. Her mother had to homeschool, then move to another town to gain public school services for her daughter. Student D's behavioral and social problems due to Asperger syndrome were amplified as teachers initially overlooked them due to high test scores, then slowly implemented RTI and 504 Plans. The ill-advised RTI behavior plan caused meltdowns and the 504 Plan allowed D's social difficulties to intensify, causing him to feel he was no good, experience greater anxiety, and wish he were dead. It was not until fifth grade that D received an IEP with recommendations guided by the specialist who diagnosed him. D's case underscores the notion that the only way to ensure FAPE is with an accurate diagnosis on which to base interventions.

As special education in the U.S. shifts its focus away from students exhibiting "unexpectedly" low performance to only those meeting below-grade-level, absolute performance criteria, equity issues arise. This new definition of disability, designed to avoid "waiting for a child to fail," makes gifted students wait longer—perhaps indefinitely—to be recognized (Reynolds & Shaywitz, 2009). Such children can only look forward to being undereducated and underemployed. Must a generation of our most capable students fail before changes are made?

Recommendations for Best Practices

1. Schools should provide comprehensive assessment whenever a disability or second exceptionality is suspected in a gifted child. Consider testing capable students who struggle and present a conundrum to teachers or parents. Laziness and motivational issues are rarely the cause of underperformance for such students. Include students with suspected other disorders, including ADHD, ASD, etc. Utilize comprehensive assessments for diagnosis, eligibility determinations, and to guide interventions. Ongoing learning assessments may be included within a body of evidence, but are insufficient for eligibility determinations.
2. Educators must inform parents who report performance concerns in a bright child of the student's right to comprehensive assessment, the protocol required to request it, and the right to due process if the request is denied. Parents should submit a request in writing

(not email) and include permission for the assessment. Parents can be excellent indicators of potential problems. The need for testing should not be determined by teacher observation. No parent should be casually denied testing for a child, informed that a child is "average," or that testing is no longer available.

3. Parents may contact their regional United States Department of Education Office of Civil Rights for help if a school refuses to evaluate a child, or fails to consider or follow a 504 Plan or IEP (see <http://3wdcrobcolp01.ed.gov/cfapps/OCR/contactus.cfm> for the nearest office). Time limits (e.g., up to 180 days) apply to contest such decisions and a paper trail of the parent's contact with school officials is necessary.
4. Educators and legislators should adapt RTI legislation and program strategies to include and protect gifted students with disabilities. Remove below-grade-level performance requirements. Combine RTI intervention strategies and comprehensive assessment to guide eligibility and needed interventions, and continue interventions as long as the child is improving. Scientifically based interventions should meet the higher conceptual needs of the gifted.
5. Legislators and educational administrators should eliminate any absolute performance requirements from federal, state, or district policies for the identification of children with SLDs that prohibit the inclusion of higher ability children from needed services, undermine the provision of FAPE, and threaten civil rights.
6. Districts and other educational entities should provide teacher training in the personality and performance patterns of twice-exceptional students to improve classroom identification of gifted students with deficits and raise academic progress benchmarks for gifted children.

Conclusion

Efforts to curb costly special education services for students with disabilities have undermined the identification of gifted children with disabilities: the Twice-Exceptional. New regulations have reduced access to comprehensive assessment and introduced restrictive, achievement-based eligibility requirements. Research indicates that gifted students with SLDs, ADHD, and ASDs are best identified by a complex pattern of strengths and weaknesses, detected through comprehensive assessment by psychologists and other specialists experienced with gifted children. Comprehensive assessments are needed to determine the nature and severity of the disorder(s) and recommend appropriate educational responses.

Since the 2004 reauthorization of federal special education law (IDEA, 2004), the first step toward application for

services for SLDs is the RTI process in which classroom teachers locate children performing below grade level (below average) and initiate interventions of increasing magnitude to alleviate performance delays. This new initial step replaces previous large-scale comprehensive assessment by having classroom teachers refer for special education only those students who first fail to respond appropriately to RTI interventions. However, there is growing concern that twice-exceptional children may be missed through this process. Many score at average levels on achievement measures by using their advanced reasoning to compensate for disabilities, despite significant learning disabilities that could undermine their success. Whereas prior to 2004 such children *could* have been identified as having SLDs through documented atypical academic progress for their high ability, current achievement-based assessments alone may miss them. Some states have extended RTI responsibilities to also determine service eligibility for children with ADHD, autistic spectrum disorders, and other disabilities less related to academic performance. Some gifted students with these disabilities have been denied interventions because they do not appear to teachers to be “impaired enough,” without evaluation by specialists.

RTI has been championed as a potential framework for differentiating education for low-performing and high-performing gifted students. If used in this way, it has potential to improve gifted education programs that are now mostly supplementary, and offers a means to address the strengths and weaknesses of twice-exceptional students, beginning in the regular classroom. However, IDEA 2004 only mandates the identification of below-grade-level students through RTI. The extension of RTI frameworks to include gifted and twice-exceptional students is both voluntary and dependent upon teachers recognizing twice-exceptionality when symptoms often present a conundrum. Parents have no due process if children are missed.

As state and local regulations have been codified since 2004, some states have imposed performance restrictions well below grade level for children to qualify for special education services for SLDs. These may or may not comply with IDEA 2004, but threaten the eligibility of gifted students with SLDs for services and can conceal disabilities from parents. Moreover, they raise the specter of increased movement away from *relative* approaches to the detection of disabilities as laws continue to evolve.

Whenever a disability is suspected in a gifted child, access to comprehensive assessment is essential to determine the level of giftedness, degree of impairment due to disabilities, areas affected by the disability, and specific accommodations needed for a twice-exceptional child. Access to comprehensive assessment is assured. Clarification of IDEA 2004 confirms that an RTI process does not replace the need for comprehensive evaluation, nor can it unduly delay or deny a request for a special education evaluation. Parents have the right to request a comprehensive evaluation at any time, in

all areas related to the suspected disability, and can initiate due process if a school refuses. Average work for twice-exceptional students may represent a “failure to thrive” and should not be construed as evidence that a student has no disabilities. To ensure equity and avoid an excessive criterion for identification, the discrepancy between strengths and weaknesses required for twice-exceptional children to qualify for services must be no greater than the discrepancy required for average children. Comprehensive assessment can be used to identify twice-exceptional students and guide interventions for them through any instructional framework, including RTI.

The current inclination of states and school districts to reduce expensive special education services for students with learning disabilities and other deficits by identifying only those who achieve at *low average* to *low* levels reflects a fundamental misconception about serving the most needy. Even when financial limitations force cutbacks, disabilities present similar barriers to the educational success of high ability children, and comparably grave results when the disability is ignored. If schools are to ensure FAPE for all, disregarding higher ability children with significant disabilities cannot be justified.

Authors' Note

This article represents the combined contributions of professionals in the field of gifted assessment, gifted education, and gifted advocacy, brought together by a single concern: the underidentification for special education services of gifted students with disabilities. The views expressed in this article represent both the experience and consensus of the authors, following a multiyear investigation of the causes and solutions to this problem.

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- Hoagies Gifted Education Page, <http://www.hoagiesgifted.org/> Hoagies offers a large library of information for parents, educators, counselors, administrators, and students about all aspects of giftedness. There is a twice-exceptional page with information on specific disabilities in the gifted. http://www.hoagiesgifted.org/twice_exceptional.htm
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Wrightslaw Special Education Law and Advocacy, www.wrightslaw.com/ This website offers information about special education law, education law, and advocacy for children with disabilities. It is a source of books by attorney Peter Wright and co-authors, and has a twice-exceptional page.

Author Biographies

Barbara (Bobbie) Jackson Gilman, MS, is Associate Director of the non-profit Gifted Development Center in Westminster, CO, where she specializes in the assessment of gifted and twice-exceptional children for educational planning and advocacy, consultation with parents, and research on the gifted and effective gifted assessment. She wrote *Academic Advocacy for Gifted Children: A Parent's Complete Guide* and *Challenging Highly Gifted Learners*. She co-chairs the National Association for Gifted Children's Assessments of Giftedness Special Interest Group and spearheaded its work on twice-exceptional issues.

Deirdre V. Lovecky, PhD, is a clinical child psychologist who directs the Gifted Resource Center of New England in Providence, Rhode Island, where she offers assessment, psychotherapy and consultation to gifted children and their families. She has conducted research and is the author of *Different Minds: Gifted Children with AD/HD, Asperger Syndrome and Other Learning Deficits*, as well as book chapters and journal articles on gifted children.

Kathi Kearney, MA, Ed, teaches elementary gifted students in Maine School Administrative District #51 in Cumberland, Maine. She has worked with children as a teacher and administrator in a wide variety of settings, urban and rural, in public, private, religious, and home schools; teaches online courses in gifted education for the University of Colorado at Colorado Springs; is a longtime examiner, home schooling consultant, and curriculum planner for the gifted; and served as the past Chair of NAGC's Conceptual Foundations Network. She has contributed scholarly journal articles on such topics as assessment, the highly gifted child, rural and distance learning, minority groups in gifted education, and Leta Stollmeyer's work on children with IQ scores above 180.

Daniel B. Peters, PhD, Licensed Psychologist, is Co-Founder and Executive Director of the Summit Center which provides assessment, consultation and treatment to children, adolescents, and families, with special emphasis in gifted, talented, creative, and twice-exceptional individuals. Dr. Peters serves on the Advisory Board for the California Association of the Gifted (CAG), is on the Editorial Board for SENG (Supporting the Emotional Needs of the Gifted), and is Co-Chair of the Assessments of Giftedness Special Interest Group for the National Association of Gifted Children (NAGC). He is the recipient of the 2013 Distinguished Service Award from the California Association for the Gifted.

John D. Wasserman, PhD is a licensed clinical psychologist and neuropsychologist with a private practice in Burke, Virginia. His interests in twice-exceptional students date back to his direction of a gifted assessment program at George Mason University and his direction of research and development on the Stanford-Binet Fifth Edition.

Linda Kreger Silverman, PhD is a licensed psychologist and founder of the non-profit Institute for the Study of Advanced Development and its subsidiaries, Gifted Development Center (GDC) and Visual-Spatial Resource in Westminster, CO. In the last

33 years, she has studied over 6,000 children who have been assessed at GDC, the largest data bank on this population. She has written over 300 articles, chapters and books, including *Giftedness 101*, *Upside-Down Brilliance: The Visual-Spatial Learner*, *Advanced Development: A Collection of Works on Giftedness in Adults*, and the textbook, *Counseling the Gifted and Talented*, serving as editor and contributor.

Michael G. Postma, EdD, serves as Head of School at Kennedy Charter School in Charlotte, NC. Michael has two children with dual exceptionalities and is active in that field writing and presenting on 2e and other educational issues.

Nancy M. Robinson, PhD, a psychologist, is Professor Emerita of Psychiatry and Behavioral Sciences at the University of Washington. Her interest in assessment began as a teaching assistant to Maud Merrill, co-author of the 1937-1972 Stanford Binets. She has studied precocity in young children and outcomes of early college entrance. She has received both the Distinguished Scholar and the Anne Isaacs Founders Memorial awards from the National Association for Gifted Children.

Edward R. Amend, PsyD, licensed psychologist, provides comprehensive psychological services in KY and OH including assessment and evaluation, consultation, counseling, and therapy for gifted, disabled, and twice-exceptional students and their families. Dr. Amend is co-author of *A Parent's Guide to Gifted Children and Misdiagnosis and Dual Diagnoses of Gifted Children and Adults: ADHD, Bipolar, OCD, Asperger's, Depression, and Other Disorders*. He has served on the Board of Directors of Supporting Emotional Needs of Gifted (SENG); as President of the Kentucky Association for Gifted Education; Chair for the National Association for Gifted Children (NAGC) Counseling and Guidance Division; consultant to the Davidson Institute for Talent Development; and Contributing Editor for Roeper Review.

Michelle Ryder-Schoeck, MA, EdS, is the coordinator of gifted programs and PEGS Administrator for the Lindbergh Schools, St. Louis, Missouri, supervising gifted programming for 600 gifted students and 100 exceptionally gifted students. In addition, she is an adjunct instructor for Maryville University.

Patricia Hedges Curry, MEd, has served as Gifted and Special Education Coordinator in St. Charles, MO, as an adjunct professor in both areas and is currently specializing in identification of gifted and exceptionally gifted children in her private practice. Previously, she received the Gifted Association of MO Parent of the Year Award and has served as president of SAGE (St. Louis Association for Gifted Education). Training teachers to work with gifted children in the regular classroom is her passion which has resulted in nationally presented workshops and two published articles.

Sally K. Lyon, MPA, is an educational consultant and founder of Our Gifted Online Conferences and a national twice-exceptional #2E twitter network, both dedicated to providing a safe harbor for those who are seeking to understand and advocate for gifted children. She is a recipient of NAGC's Professional Achievement Certificate Program 2003, UAGC's Sally M. Todd Local Leadership Award 2006, and Top Online Educator Award 2007. She serves on SENG's Editorial Board and is a liaison, served on NAGC's Parent Advisory Committee, helped develop the Mile Marker Series, and has written for Understanding Our Gifted.

Karen B. Rogers, PhD, is Professor of Gifted Studies at the University of St. Thomas College of Education, Leadership, and Counseling in Minneapolis, Minneapolis. She has assessed many children using both the Wechsler and Stanford Binet intelligence tests and is author of *Re-forming Gifted Education* and *A Menu of Grouping Options for Gifted Learners*.

Linda E. Collins, MEd, a gifted education teacher at Blue Valley Southwest High School in Overland Park, KS, specializes in working with 2e students, presents nationally, and enjoys researching and writing about gifted students. In 2009, Linda was semi-finalist for Region 3, Kansas Teacher of the Year; was Master Teacher of the Year for Blue Valley School District in 2004; was named a 2013 Sunflower Ambassador for the Blue Valley School District; and is a member of the Editorial board for SENG. Currently, Linda is working on a doctorate at University of Kansas.

Gerry M. Charlebois, MA, is the Executive Director for Advanced Academic Services for the Carrollton-Farmers Branch School District in Carrollton-Farmers Branch, Texas. Her District is unique in that it provides programs and services, in a public school setting, for the profoundly gifted child. She has provided staff development

and presentations for educators and parents to help them better understand the nature and needs of the gifted child.

Colleen, M. Harsin, MA, MSW, serves as Director of The Davidson Academy of Nevada. She was instrumental in the development and expansion of the Davidson Young Scholars program, working directly with profoundly gifted young people, their parents, and educators in the areas of educational advocacy and planning, talent and interest development, and socio-emotional well-being. Since 2003, Ms. Harsin has actively participated in focus groups in support of the Institute for Research and Policy on Acceleration.

Sylvia B. Rimm, PhD, is a psychologist, Director of the Family Achievement Clinic, part-time counselor at Menlo Park Academy in Cleveland, and previous member of the NAGC Board of Directors. Dr. Rimm is a syndicated columnist; was a longtime contributor to NBC's Today Show, to public radio and a popular TV guest; is the author of more than 20 books; and co-author, with Gary Davis and Del Siegle, of the textbook, *Education of the Gifted and Talented*. She is a recipient of the Ann Isaacs Award, and the first recipient of the Palmarium Award, both for her contributions to gifted education.