

Twice-Exceptionality

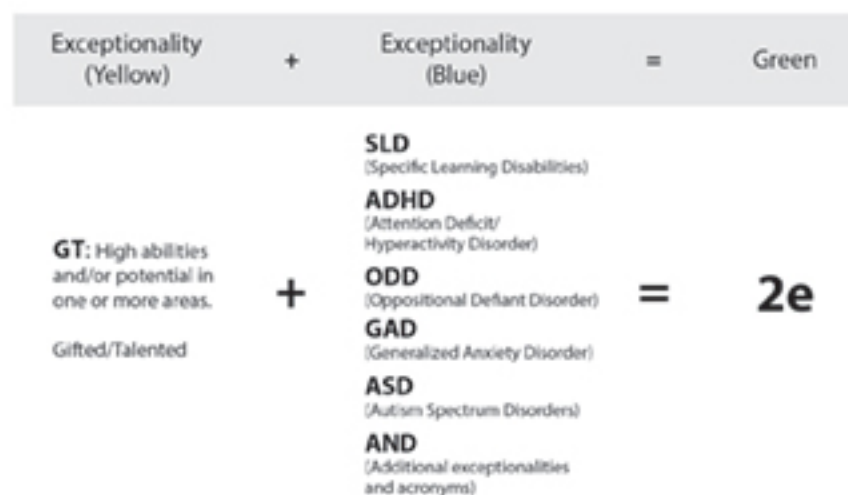
A Field Whose Time Has Come

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Over the past 3 decades, worldwide interest in a special population of students has caught the attention of scholars, practitioners, and parents. Known as the twice-exceptional, or 2e, this group of learners is characterized by advanced abilities as well as learning difficulties that include deficits in areas such as reading, writing, focusing attention, and/or understanding social cues. These deficits are often associated with disability diagnoses and special education accommodations. Students' strengths, however, may find a home in the field of gifted education. Figure 1.1 shows possible combinations constituting twice-exceptionality.

Although 2e students have high, even exceptional, abilities in some domains, their challenges (which can include academic, social, emotional, and behavioral issues) can hold them back. Their educational journeys are often filled with detours and roadblocks, as their learning and behavior profiles are frequently at odds with traditional methods of schooling (Assouline & Whiteman, 2011; Baum et al., 2014; Foley-Nicpon et al., 2011; Reis et al., 2014).

FIGURE 1.1
The 2e Equation



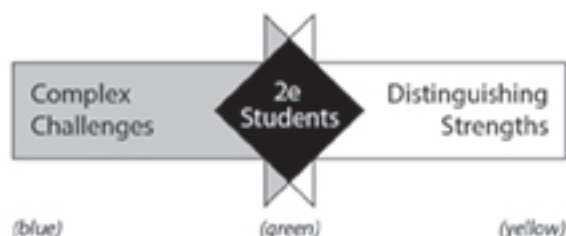
Note. From *To Be Gifted and Learning Disabled: Strength-Based Strategies for Helping Twice-Exceptional Students With LD, ADHD, ASD, and More* (3rd ed., p. 20), by S. M. Baum, R. M. Schader, and S. V. Owen, 2017, Prufrock Press. Copyright 2017 by Prufrock Press. Reprinted with permission.

The concept of twice-exceptionality is difficult because the two distinct needs of 2e students cannot be segregated. This means that addressing one aspect in isolation of the other is not optimal and may, in fact, be detrimental to successful learning.

Consider 2e students in this way: Each 2e student has distinguishing strengths usually associated with “giftedness” (think yellow) and complex challenges usually associated with “special education” (think blue). As with painting, when yellows and blues mix, variations of green result. Neither the yellow nor the blue can be taken out of the mix and still result in green. Think of twice-exceptional students as green. They will always be green, living with their incongruous combination of gifts and disabilities (see Figure 1.2).

The arrows in Figure 1.2 are a two-dimensional representation of green, one that risks implying that students are a static blend or type, but the reality is that each student moves across the spectrum from yellow to blue at different times, within different environments, and in response to changing conditions. When stakeholders understand their supporting roles, they can help 2e students maximize and develop their strengths while discovering ways to minimize and accommodate for their challenges.

FIGURE 1.2
Making Green



Note. From *The 2e Center for Research and Professional Development* [PowerPoint slides], by Bridges Academy, 2013. Copyright 2013 by Bridges Academy. Reprinted with permission of the author.

Unfortunately, even today some professionals continue to argue that gifted students cannot also have disabilities or special needs. Others claim that the 2e population is too amorphous. Increasing evidence suggests that these students not only exist, but also have remarkable minds (Foley-Nicpon et al., 2011). In fact, many believe that these students represent future creators and leaders in a world that requires innovation and talent.

This chapter provides an overview of the origins of the field of twice-exceptionality, the characteristics of 2e students, clear definitions that guide practice, and an educational approach that can support their needs.

The Origins of the Field

The relatively new field of twice-exceptionality results from a marriage between two branches of education: gifted education (with a focus on identifying advanced abilities and providing enrichment and talent development opportunities) and special education (with a focus on identifying deficits and remediating those deficits). Each of these educational specializations addresses human differences. Long before these two fields were firmly established individually, psychologists referenced the still-argued idea that individuals could be both exceptionally able and display concurrent learning, behavioral, and social issues. Hollingworth (1923) wrote about students with superior intelligence and limiting deficiencies. She began her work at the Clearinghouse for Mental

Defectives, but also led the work at the Speyer School for rapid learners in New York City, as she was fascinated with highly gifted students. Through her study of seven nonreaders with IQs ranging from 94 to 130, Hollingworth noted that some of them also had difficulty learning in specific areas. She also wrote, "Occasionally, a very intelligent child is found who does not readily learn arithmetic and on the other hand there exists children whose ability at calculations far exceeds expectation from other performances" (p. 114).

Similarly, Orton (1925), who studied reading disorders, recognized that learning issues were not necessarily due to below-average intelligence scores as measured by the Stanford Binet IQ test. This finding was later confirmed in studies conducted by Asperger (1944), who was looking at children who exhibited sets of behaviors that seemed incongruous—excellent logical abstract thinking and isolated areas of high knowledge and/or intense interest, but also pedantic speech, impairment of two-way interactions, repetitive and stereotyped play, and unawareness of and inability to deal with environmental demands. He later pointed out that some of these individuals had high levels of intelligence (Asperger, 1979).

However, these observations went no further. No effort was made to distinguish students who may have had both high abilities and disabilities from those students with disabilities and average or less-than-average abilities. In fact, in all cases, attention was drawn to the disability regardless of the levels of cognitive abilities. For example, Cruickshank et al. (1961) investigated students who exhibited neurological deficits, such as:

- increased motor activity,
- poor organization of behavior,
- distractibility of more than ordinary degree under ordinary conditions,
- persistent faulty perceptions,
- persistent hyperactivity, and
- awkwardness and consistently poor motor performance.

These deficits resulted in students' failure to read, write, and spell. In their work on teaching methods for children who are brain-injured and hyperactive, Cruickshank et al. noted that many of the children also possessed superior intelligence. However, their study focused on the need for a structured environment in which distractions were minimized within an individualized curriculum for their sample of students. Although it was apparent that the students were often scoring in the superior range on an intelligence test, there were no specific strategies for accommodating their advanced abilities.

Interestingly, Cruickshank (1977) later hypothesized that hyperactivity and distractibility may actually describe the way some high-ability students

absorb information, suggesting that attention to all stimuli in their environment actually may have enhanced their knowledge acquisition. But, in reality, although special education expanded to include students with superior intellectual abilities, the focus remained on what students could *not* do, what their learning and attention issues were, and how to remediate their deficits.

This deficit-based approach took on a life of its own when Kirk and Bateman (1962) offered an alternative hypothesis as to why students with at least average ability were having difficulties in school. They argued that the etiology of the problem resulted from underlying language and learning deficits, which stemmed from perceptual and cognitive processing difficulties. Kirk and Bateman coined the term "learning disabilities," which steered away from the concomitant behaviors of hyperactivity and distractibility. Interestingly, the intellectual profiles of those they observed showed peaks and valleys that distinguished the group from below-average students who presented a more even pattern of abilities.

In 1966, Gallagher, an educational psychologist who was interested in both gifted students and students with learning challenges, pointed out that some students with learning disabilities had considerable strengths in comparison to their areas of weakness. Gallagher (1986) later referred to these students as *twice-exceptional*—the first mention of that term to describe students who were gifted and displayed learning disabilities at the same time. This new label, however, still focused on "fixing" as the primary approach to addressing learning differences, without regard to students' ability potential.

During this period, interest in gifted and talented students was also gaining momentum. Psychologists sought to understand the characteristics of individuals who scored in the top 2% of the population on measures of intelligence. Around the same period, Hollingworth (1923) presented a contrasting view. She saw a great need for this group of students to have a learning environment especially designed to meet their "brilliance" and introduced the idea of enrichment as a way to meet the needs of gifted students.

In short, the fields of special education and gifted education were taking different paths. Giftedness was narrowly defined to include students who demonstrated high cognitive abilities, without any nod to those who may have concurrent learning challenges. Gifted students received advanced curriculum and enrichment, while those students identified as requiring special education services were supported through a remedial approach, regardless of their intellectual profiles. In the United States, the separation was reinforced by the passage of two federal laws. The first, the Education for All Handicapped Children Act of 1975, mandated a free and appropriate public education for all children with disabilities, ensured due process rights, and mandated Individualized