

UNIQUE LEARNERS

Twice-exceptional learners are unique individuals with learning characteristics that are atypical of gifted students or students with disabilities. There is no federal definition to guide the identification of this special population of gifted students. As a result, misconceptions and stereotypical notions hinder the identification of twice-exceptional learners. This chapter will examine the characteristics of twice-exceptional learners and their unique learner profiles. It will scrutinize misconceptions and stereotypical beliefs that hinder identification, leaving students vulnerable in an education system that does not understand their unique needs.

Characteristics

Twice-exceptional learners have the "characteristics of gifted students with potential for high performance, along with the characteristics of students with disabilities who struggle with many aspects of learning" (Brody & Mills, 1997, p. 282). The

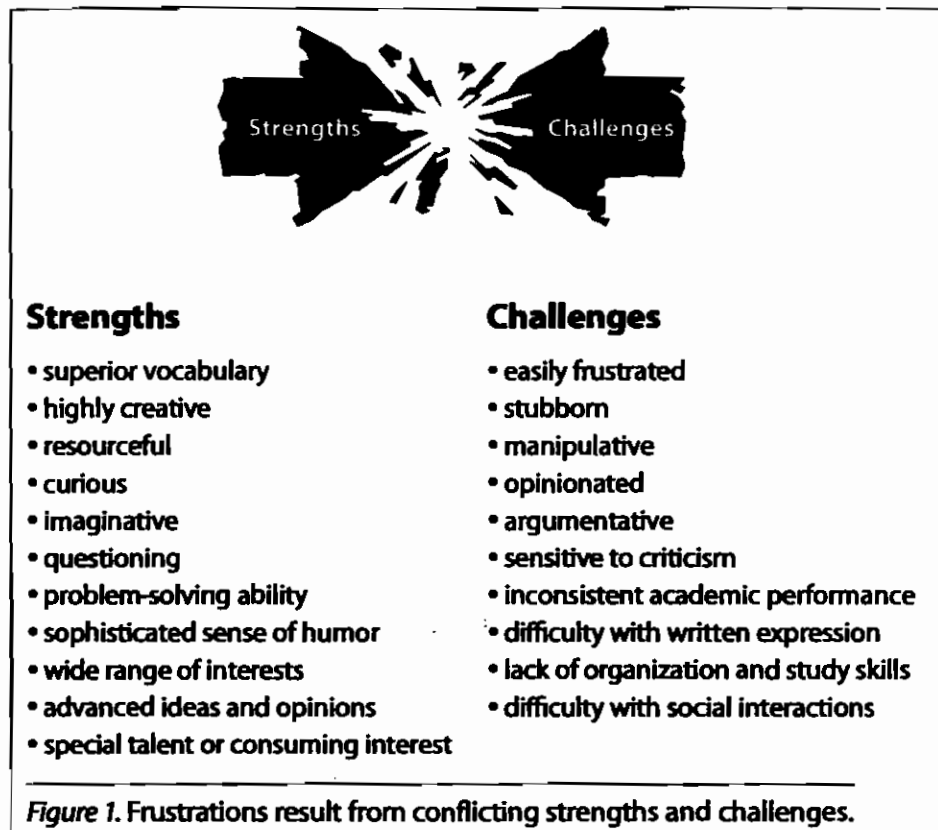
extremes of their abilities and disabilities can create academic, social, and emotional conflicts.

Characteristics of Gifted Learners

Typically, twice-exceptional learners have a superior vocabulary (Nielsen, 2002; Reis, Neu, & McGuire, 1995), penetrating insights into complex issues (Nielsen, 2002), and a wide range of interests (Nielsen & Higgins, 2005). They can develop consuming interests in a particular topic and develop expertise beyond their years (Nielsen, 2002). Twice-exceptional learners are highly creative (Baum & Owen, 1988; Reis et al., 1995), divergent thinkers with a sophisticated sense of humor. Their sense of humor can at times be viewed as "bizarre" (Nielsen, 2002). With other gifted students they share a propensity for advanced-level content, task commitment in areas of interest, a desire for creating original products, enjoyment of abstract concepts, and a nonlinear learning style (Renzulli, 1978; Tannenbaum & Baldwin, 1983; Van Tassel-Baska, 1991; Whitmore, 1980). They learn concepts quickly and hate "drill and practice" assignments, preferring open-ended assignments and to solve real-world problems (Baum & Owen, 1988). They have a high energy level and tend to be more interested in the "big picture" than the details. Twice-exceptional learners are curious and constantly questioning to gain a more in-depth understanding of issues and concepts.

Characteristics of Students With Disabilities

Twice-exceptional children lack the skills they need to be successful in school even though they have the characteristics of gifted students. The academic performance of twice-exceptional learners can be inconsistent with reported problems with reading, expressive language, writing, and math skills (Nielsen, 2002; Reis et al., 1995). Cognitive processing deficits in auditory processing, visual processing, and processing speed decreases their ability to process information and negatively influences their academic achievement. Lack of organizational skills results in messy desks, backpacks, lockers, and problems keeping track of papers. Deficits in prioritizing and planning make it difficult for them to complete assignments in a timely manner. They are easily distracted and experience difficulties in focusing and sustaining attention (Reis et al., 1995). Problems with gross and fine motor coordination is evidenced by poor handwriting and lack of coordination when playing sports (Weinfeld, Barnes-Robinson, Jeweler, & Shevitz, 2002). Many twice-exceptional learners experience short- and long-term memory deficits, making it difficult to memorize math facts and remember names of letters and grammar and spelling rules. They have difficulty thinking in a linear fashion and may be unable to follow directions (Nielsen, 2002).



Social and Emotional Characteristics

Their unique characteristics can thrust twice-exceptional children into emotional frustration (Nielsen & Higgins, 2005). The extreme frustration these gifted learners feel when they cannot meet their own and others' expectations, combined with frustration of teachers who cannot understand why a bright child does not achieve, leads to conflict, misunderstandings, and failure in school. They can appear stubborn, opinionated, and argumentative, yet they also can be highly sensitive to criticism. Many twice-exceptional learners have limited interpersonal and/or intrapersonal skills (Nielsen, 2002; Reis et al., 1995) and can become the target of peer bullying, which leads to feelings of isolation when they are unable to experience normal peer relationships. In an effort to avoid failure, twice-exceptional learners may try to manipulate the situation. A refusal to complete assignments may be an attempt to avoid failure. When faced with failure, twice-exceptional learners can become very anxious, angry, and depressed.

It is the contrast between the student's abilities and disabilities that creates conflicts and tends to make school a frustrating experience for the twice-exceptional learner, their parents, and teachers. Figure 1 provides a visual representation of the combination of contrasting strengths and challenges that creates academic, social, and emotional problems for twice-exceptional learners. Use this

figure to help students, parents, and teachers understand how the strengths and challenges influence the achievement and behavior of twice-exceptional learners. Figure 2 provides a more extensive list of twice-exceptional characteristics. Copy this list and ask teachers and parents to identify specific strengths and challenges of a twice-exceptional learner. This information will be used to identify needs in the Twice-Exceptional Planning Continuum, presented later in this book.

Different Perspectives

Historically, the academic, social, and emotional needs of twice-exceptional students have been overlooked because of stereotypical notions (Whitmore, 1981). Widespread beliefs that gifted students score uniformly high on tests of intelligence and are teacher pleasers have prevailed since the early 20th century when Lewis Terman began using the Stanford-Binet IQ test, an intelligence test, to identify students with mental retardation (now called intellectual disabilities) who would not benefit from education and to identify students with superior mental abilities (Davis & Rimm, 2004). Gifted students and students with intellectual disabilities were believed to be at opposite ends of the intellectual spectrum. The early focus of gifted education was on students with superior IQ scores and the focus of special education was on children with intellectual disabilities.

Education of Gifted Students

Early research brought empirical and scientific credibility to the field of gifted education. Terman became known as the father of gifted education for his longitudinal study of 1,528 gifted students that began in 1921. This study concluded that gifted students had superior mental abilities and were physically, psychologically, and socially healthier than their peers (Burks, Jensen, & Terman, 1930; Oden, 1968; Terman, 1925; Terman & Oden, 1947, 1959). Students were selected for the study based on their IQ scores. Davis and Rimm (2004) were critical of the selection process used for this study because classroom teachers selected the students who would participate in IQ testing. Students selected for the study were more likely to be teacher pleasers. It should be noted that two students, Luis Alvarez and William Shockley, were not included in the study because their IQ scores were not high enough, yet years later they achieved distinction as Nobel Prize winners. The description of the gifted child as the "near perfect child" is not an accurate picture of many gifted children, and it continues to place destructive internal and external pressures on students who are gifted but do not fit the perfect mold (Davis & Rimm, 2004).

The field of gifted education has experienced many ups and downs. When Russia launched the satellite Sputnik in 1957, American education was criticized

Characteristics of Twice-Exceptional Learners	
<ul style="list-style-type: none"> • Discrepancy among standardized test scores • Superior verbal and communication skills • Visual learner with strong perceptual reasoning skills • High level of reasoning and problem-solving abilities • Conceptual thinker who comprehends "big picture" • Unable to think in a linear fashion • Auditory processing deficits and difficulty following verbal instructions • Slow processing speed and/or problems with fluency and automaticity • Executive functioning deficits in planning, prioritizing, and organizing • Highly creative, curious, and imaginative • High energy level • Distractible, unable to sustain attention, or problems with short-term memory • Sensory integration issues 	
<ul style="list-style-type: none"> • Demonstrates inconsistent or uneven academic skills • Advanced ideas and opinions • Wide range of interests • Advanced vocabulary • Penetrating insights • Specific talent or consuming interest • Hates drill and practice assignments • Difficulty expressing feelings or explaining ideas or concepts • Work can be extremely messy • Poor penmanship and problems completing paper-and-pencil tasks • Avoids school tasks, and frequently fails to complete assignments. • Appears apathetic, is unmotivated, and lacks academic initiative 	
<ul style="list-style-type: none"> • Difficulty relating to peers, poor social skills, and/or antisocial behavior • Capable of setting up situations to own advantage • Isolated from peers and does not participate in school activities • Target of peer bullying • Cannot read social cues • Lacks self-advocacy skills • Disruptive or downing behavior 	
<ul style="list-style-type: none"> • Highly sensitive to criticism • Perfectionist who is afraid to risk making a mistake • Denies problems and/or blames others for mistakes and problems • Believes success is due to ability or "luck" • Behaves impulsively • Self-critical, has low self-esteem and self-efficacy • High levels of anxiety and/or depression • Easily frustrated, gives up quickly on tasks 	

Figure 2. Characteristics of twice-exceptional learners. Adapted from Nielsen, 1993.

for the lack of challenging curriculum. According to the National Association for Gifted Children (n.d.b), this triggered an effort to improve education and paved the way for the development of challenging curriculum for gifted students who were capable of completing advanced study in math and science. Later, elitism characterized by the belief that gifted students are inherently superior led to an anti-intellectual backlash directed toward gifted education (Colangelo, 2003). Today, No Child Left Behind legislation has placed greater emphasis on students who are not performing at acceptable levels (VanTassel-Baska, 2006).

Education of Students With Disabilities

Students with intellectual disabilities were excluded from public education, forcing parents to keep their children at home or put them in an institution. In 1954, *Brown v. Board of Education* ended separate but equal education and opened the doors for similar gains by special education. Because many students with disabilities continued to be denied a public education, parents began to lobby for a free, appropriate public education (FAPE) for their children in 1960. The Elementary and Secondary Education Act (ESEA) addressed inequities of students in 1965. Congress established the Bureau for the Education of the Handicapped in 1966 with the Title VI amendment to the Elementary and Secondary Education Act (ESEA) and provided a small amount of federal funds for the education of students with disabilities.

Parents lobbied for state laws requiring local education agencies (LEAs) to provide special education services to their children with disabilities. Two federal court cases focused attention on students with disabilities. *Pennsylvania Association for Retarded Citizens (PARC) v. Commonwealth of Pennsylvania* (1971) and *Mills v. Board of Education of District of Columbia* (1972) found under the Fourteenth Amendment of the United States Constitution that it was the responsibility of state and local school districts to educate students with disabilities. The Education for the Handicapped Act (EHA) combined several initiatives to provide limited financial assistance under one law in 1972. States joined advocates to seek passage of federal legislation to subsidize the cost of special education. FAPE for special education students became a reality with the 1975 Education for All Handicapped Children Act (EAHCA). It was renamed the Individuals with Disabilities Education Act, or IDEA, in 1990. IDEA was reauthorized with substantive changes in 1997 and again in 2004.

Converging Ideas

During the 1970s, definitions of both gifted education and special education broadened. The Marland (1972) definition included intellectual, specific

academic, leadership, creative and productive thinking, visual and performing arts, and psychomotor abilities. The ranks of special education were expanded to include more students with less severe disabilities. EAHCA and IDEA included students with physical, language, speech and vision, mental retardation (now considered intellectual disabilities), and emotional and behavioral disabilities. With the expanded definitions in the 1970s came the realization that gifted students could have disabilities and the categories of gifted and disabled were not mutually exclusive (Davis & Rimm, 2004; Grimm, 1998).

The Council for Exceptional Children formed a committee in 1975 to discuss twice-exceptional students (Coleman, 2005). That year, two twice-exceptional projects received federal funding. A project in Chapel Hill, NC, was based on Bloom's taxonomy and a project at the University of Illinois focused on Guilford's Structure of the Intellect (SOI). In 1976, the Council for Exceptional Children and the Connecticut Department of Education sponsored the first conference on twice-exceptionality. About this time, Maker (1977) hypothesized that the incidence of giftedness should occur at the same rate in the population of students with disabilities as it did in the population of students without disabilities. She estimated that 3% of special education students were gifted. Today, we do not know exactly how many students fall into the ranks of twice-exceptionality, but in 1993, The National Research Center on the Gifted and Talented reported that 2%–7% of the special education population was comprised of twice-exceptional learners, based on data collected by the center (see Nielsen, 1993).

In a seminal article, Whitmore (1981) indicated a new area of professional specialization was beginning. She calculated that between 120,000 and 180,000 handicapped students were gifted. However, in 1982, the U.S. Supreme Court in *Board of Education of Hendrick Hudson Central School District v. Rowley* found that Amy Rowley, a hearing impaired student, was performing adequately and progressing through the grades. The Supreme Court held that the law did not require states to develop the potential of students with disabilities (La Morte, 2005). This decision has negatively influenced the education of gifted students with disabilities and prevented students who performed at grade level from receiving special education services. From 1990–1996, the Jacob K. Javits Gifted Education Grant funded the Twice-Exceptional Child Project (Nielsen, 1989, 1993) that continues to guide the education of twice-exceptional students. In addition, Project High Hopes (Baum, 1997), funded from 1993 to 1996, focused on authentic projects and the importance of developing the strengths of twice-exceptional students.

Definitions

A clear definition of giftedness supports common understanding, while

incomplete definitions can lead to misunderstandings and sporadic progress (Moon, 2006). Definitions can discriminate against students and deny services to special populations of students including minority, poor, underachieving, disabled, and gifted students (Davis & Rimm, 2004). An equitable definition of giftedness helps educators identify and serve children from a wide variety of backgrounds and cultures (Moon, 2006). Labeling students can have both positive and negative influences on expectations of others and the student's self-esteem. Being identified as gifted raises expectations while identification of a disability tends to lower teacher expectations (Bianco, 2005). To be effective, an educational definition should reflect current theory and research, be incorporated into the school's mission statement, provide the foundation for identification, and be linked to specific programming services (Moon, 2006).

Definition of Gifted Students

Researchers and theorists in gifted education seek to generate a clear definition of giftedness while our understanding of the topic continues to change (Moon, 2006). The social construct of giftedness is influenced by cultural values and politics. Lewis Terman (1925) defined giftedness as a score of more than 140 on the Stanford-Binet IQ test. The multiple intelligences theory developed by Howard Gardner (1999) and Robert Sternberg's (1985) triarchic theory are examples of neurobiological/cognitive definitions. Renzulli's (1978) three-ring conception of giftedness is a creative-productive definition utilizing multiple measures of standardized IQ tests, academic achievement tests, and authentic assessments in the identification process. Psychosocial definitions of Tannenbaum (1986) and Gagné (2000) emphasized the role of individual characteristics and environmental factors (Moon, 2006). The contemporary paradigm of gifted education recognizes diversity within the population of gifted students and a shift from psychometric perspectives to promote a multidimensional view (Bianco, 2005; Feldman, 1992).

Composite definitions are comprised of multiple theoretical perspectives and are the most widely adopted definitions by states and school districts. The Marland Report (1972) and the U.S. Department of Education's (1993) *National Excellence: A Case for Developing America's Talent* report provide examples of composite definitions. These definitions usually are operationalized with separate identification procedures for each talent area. The Marland definition was modified by Congress in 1978 and again in 1988. The federal definition reads as follows:

Children and youth with outstanding talent who perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment. These children and youth exhibit high performance capability in intellec-

tual, creative, and/or artistic areas, possess an unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by the schools. Outstanding talents are present in children and youth from all cultural groups across all economic strata, and in all areas of human endeavor. (U.S. Department of Education, 1993, p. 26)

The National Association for Gifted Children (n.d.c) has updated its definition of gifted children to read as follows:

A gifted person is someone who shows, or has the potential for showing, an exceptional level of performance in one or more areas of expression.

Some of these abilities are very general and can affect a broad spectrum of the person's life, such as leadership skills or the ability to think creatively. Some are very specific talents and are only evident in particular circumstances, such as a special aptitude in mathematics, science, or music. The term giftedness provides a general reference to this spectrum of abilities without being specific or dependent on a single measure or index. It is generally recognized that approximately five percent of the student population, or three million children, in the United States are considered gifted.

A person's giftedness should not be confused with the means by which giftedness is observed or assessed. Parent, teacher, or student recommendations, a high mark on an examination, or a high IQ score are not giftedness; they may be a signal that giftedness exists. Some of these indices of giftedness are more sensitive than others to differences in the person's environment. (para. 4-6)

The definition evolves as research continues and our understanding of giftedness increases. It is important to remember that gifted potential is present in students from all cultural groups and economic backgrounds. However, for gifted potential to develop, it must be nurtured. Educators play an important role in supporting the development of gifted potential. I like Renzulli's definition of giftedness, which is also on the National Association for Gifted Children's (n.d.c) website and reads as follows:

Gifted behavior occurs when there is an interaction among three basic clusters of human traits: above-average general and/or specific abilities, high levels of task commitment (motivation), and high levels of creativity. Gifted and talented children are those who possess or are capable of developing this composite of traits and applying them to any potentially valuable area of human performance. As noted in the Schoolwide Enrichment Model, gifted behaviors can be found "in certain people (not

all people), at certain times (not all the time), and under certain circumstances (not all circumstances).” (para. 11)

Definition of Students With Disabilities

The Education for All Handicapped Children Act and the Individuals with Disabilities Education Act broadened the definition of children with disabilities and identified specific categories of disabilities. IDEA’s definition of disability reads as follows:

Child with a disability means a child evaluated in accordance with Sec. Sec. 300.304 through 300.311 as having mental retardation, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious emotional disturbance (referred to in this part as “emotional disturbance”), an orthopedic impairment, autism, traumatic brain injury, an other health impairment, a specific learning disability, deaf-blindness, or multiple disabilities, and who, by reason thereof, needs special education and related services. (IDEA, 2004, Section 300.8)

Knoblauch and Sorenson (1998) provided a summary of the individual disability definitions under IDEA:

- **Autism:** A developmental disability significantly affecting verbal and non-verbal communication and social interaction, generally evident before age 3, that adversely affects a child’s educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences.
- **Deafness:** A hearing impairment so severe that the child cannot understand what is being said even with a hearing aid.
- **Deaf-Blindness:** A combination of hearing and visual impairments causing such severe communication, developmental, and educational problems that the child cannot be accommodated in either a program specifically for the deaf or a program specifically for the blind.
- **Emotional Disturbance:** A condition exhibiting one or more of the following characteristics, displayed over a long period of time and to a marked degree that adversely affects a child’s educational performance:
 - An inability to learn that cannot be explained by intellectual, sensory, or health factors
 - An inability to build or maintain satisfactory interpersonal relationships with peers or teachers.
 - Inappropriate types of behavior or feelings under normal circumstances.

- A general pervasive mood of unhappiness or depression.
 - A tendency to develop physical symptoms or fears associated with personal or school problems.
 - This term includes schizophrenia, but does not include students who are socially maladjusted, unless they have a serious emotional disturbance.
-
- **Hearing impairment:** An impairment in hearing, whether permanent or fluctuating, that adversely affects a child's educational performance but that is not included under the definition of deafness as listed above.
 - **Mental retardation:** Significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period that adversely affects a child's educational performance.
 - **Multiple disabilities:** A combination of impairments (such as mental retardation-blindness, or mental retardation-physical disabilities) that causes such severe educational problems that the child cannot be accommodated in a special education program solely for one of the impairments. The term does not include deaf-blindness.
 - **Orthopedic impairment:** A severe orthopedic impairment that adversely affects educational performance. The term includes impairments such as amputation, absence of a limb, cerebral palsy, poliomyelitis, and bone tuberculosis.
 - **Other health impairment:** Having limited strength, vitality, or alertness due to chronic or acute health problems such as a heart condition, rheumatic fever, asthma, hemophilia, and leukemia, which adversely affect educational performance.
 - **Specific learning disability:** A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. This term includes conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. This term does not include children who have learning problems that are primarily the result of visual, hearing, or motor disabilities; mental retardation; or environmental, cultural, or economic disadvantage.
 - **Speech or language impairment:** A communication disorder such as stuttering, impaired articulation, language impairment, or a voice impairment that adversely affects a child's educational performance.
 - **Traumatic brain injury:** An acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, that adversely affects a child's educational performance. The term applies to open or closed head inju-

ries resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgment; problem-solving; sensory, perceptual, and motor abilities; psychosocial behavior; physical functions; information processing; and speech. The term does not apply to brain injuries that are congenital or degenerative, or brain injuries induced by birth trauma.

- **Visual impairment, including blindness:** An impairment in vision that, even with correction, adversely affects a child's educational performance. The term includes both partial sight and blindness. (p. 2)

The number of individuals identified with a learning disability has increased by 150%–200% since 1975 (Scruggs & Mastropieri, 2002). This has dramatically impacted school districts across the nation because the cost of educating students with disabilities is twice the cost of educating general education students (Vaughn & Fuchs, 2003). Flaws in the discrepancy method blamed for this increase include (a) the inability to distinguish if poor school performance was a result of a learning disability or underachievement, (b) statistical regression that causes scores to regress toward the mean over time, (c) overestimation and underestimation of ability, and (d) lack of sensitivity to learning problems (Fuchs, Mock, Morgan, & Young, 2003). IDEA (2004) changed the way eligibility decisions are made. Now the process is more student-centered and includes a collaborative team informed by assessment data and progress-monitoring decisions based on the student's needs and strengths (U.S. Department of Education, n.d.).

Definition of Twice-Exceptional Students

There is no federal definition for twice-exceptional students and the lack of a clear description has resulted in only a limited number of gifted students with disabilities being identified (Brody & Mills, 1997). Many states and school districts require twice-exceptional students to meet the eligibility criteria for both giftedness and disabilities.

Using separate definitions for giftedness and disabilities is problematic. Gifted learners with disabilities frequently do not meet the identification criteria for either exceptionality because gifted characteristics can mask the disability and the disability can mask the giftedness (Maker & Udall, 1985). A definition for twice-exceptional learners could read as follows:

Twice-exception learners have the characteristics of gifted students and students with disabilities. They have the potential for exceptional performance in one or more areas of expression, which includes general areas such as creativity and leadership or specific areas such as math, science, and music. These students have an accompanying disability in one or more of categories defined by IDEA.

Comprehensive educational planning by a collaborative team is necessary for meeting twice-exceptional learners' diverse needs. These students need a continuum of services to nurture their gifted potential, to provide support in their area(s) of disability, to foster positive interpersonal relationships, and to promote intrapersonal understanding.

Identification

Early identification and appropriate interventions can help to prevent the development of social and behavioral problems that can occur when the needs of a gifted child with learning disabilities are overlooked (Brody & Mills, 1997; Whitmore, 1980). Yet, the identification of twice-exceptional learners continues to be problematic because of ambiguities related to the definitions for giftedness and disabilities (Hannah & Shore, 1995). Twice-exceptional learners are a heterogeneous group representing all types of giftedness combined with various disabilities (Brody & Mills, 1997). There is no consensus on one defining pattern or set of scores to identify gifted students with disabilities. Identifying students for gifted programs and students with disabilities for special education services continue to be mutually exclusive activities (Boodoo, Bradley, Frontera, Pitts, & Wright, 1989). Relying on separate prevailing definitions and identification procedures for gifted students and students with disabilities makes identification difficult when students possess characteristics of both groups. The separate protocols used to identify students for gifted and special education fail to consider the unique characteristics of students with both exceptionalities. Atypical learning styles and rigid cut-off scores make it difficult for these students to qualify for either gifted or special education programming (Trail, 2006).

The early struggles of twice-exceptional students often go unnoticed when the gifted characteristics mask the disability and the disability masks the gifted potential. Some will be identified as gifted, others as students with disabilities, and many will not receive any services because they appear to be average students. Twice-exceptional children can reach developmental milestones before their age peers. Their advanced vocabulary and communication skills raise teachers' and parents' expectations for achievement in school. As they progress through the grades, they begin to experience difficulties in school. Twice-exceptional learners work hard to hide their learning problems and to maintain the persona of a gifted student. However, each year it becomes harder for these students to maintain their gifted identity. Because their learning problems remain unrecognized, their achievement continues to decline. These students often become known as under-achievers and unmotivated students and, sometimes, less-flattering terms such as lazy are used to describe them (Silverman, 1993). By the time their performance

drops below grade level and someone suspects a disability, their gifted potential may no longer be visible.

Stereotypical beliefs can hinder the identification of twice-exceptional children (Bianco, 2005; Cline & Hedgeman, 2001; Johnson, Karnes, & Carr, 1997; Whitmore & Maker, 1985). Gifted potential is seldom identified in students with failing grades and incomplete assignments (King, 2005). Some educators question if a student with serious learning problems can be gifted (Brody & Mills, 1997). Research by Bianco (2005) found that once a child was identified with a disability, teachers were reluctant to refer him for gifted programming. Gifted students with emotional and behavior problems often are not referred for gifted programs or they are terminated from gifted programs because of their behavior (Reid & McGuire, 1995). Unfortunately, too many twice-exceptional students fail to meet the eligibility requirements for either giftedness or learning disabilities because identification protocols fail to consider the special characteristics of this population (Brody & Mills, 1997). Time and energy is wasted determining if students are truly gifted and/or if they qualify for special education services. Many twice-exceptional learners who are not identified for services provided by gifted education or special education are later identified for personality and behavioral problems (Waldron, Sapphire, & Rosenblum, 1987).

Evidence of underachievement typically is required in screening for learning disabilities (Beckley, 1998). Gifted students rarely get referred because they are able to compensate for their learning problems (Senf, 1983). Although they may be underachieving when compared to their potential, their above-grade-level performance can prevent their identification for a learning problem. The criteria for identifying students with a learning disability in some states requires achievement to be at least 2 years below grade level in at least one subject area. Therefore, it is unlikely that a young gifted student with learning disabilities will be identified (Reis & McCoach, 2002). Many educators view below-grade-level achievement as a prerequisite to a diagnosis of a learning disability (Baum, 1990). Even when teachers recognize the student has issues that would lead them to believe there is a disability, the determination that a student is not eligible for special services means they will remain in the general education program (Reid & McGuire, 1995). Selecting students whose achievement is in the bottom 20% of the class for intervention will mean that gifted students with learning disabilities, who function at or near grade level, will not be identified. Achievement of gifted students must be compared to their ability (Reynolds, Zetlin, & Wang, 1993; Siegel & Metsala, 1992). Evidence of a processing deficit can be helpful in differentiating between a gifted learner who is underachieving and a gifted learner with a disability (Rimm, 1986; Whitmore & Maker, 1985). Distinguishing underachievement from learning problems caused by neurological dysfunction is important to maintain integrity in the field of learning disabilities (Adelman, 1992). Twice-exceptional students can underachieve for many years before their achievement

falls significantly below the average level of their age peers. In fact, some students are never identified for either gifted or special education programming.

New Directions

The Individuals with Disabilities Education Improvement Act (IDEA) of 2004 and the Response to Intervention (RtI) model reflect new ideas related to the way educators assess, identify, and provide services to students with disabilities. The reauthorization of IDEA mentioned gifted students with disabilities for the first time as a priority group whose needs can be funded in U.S. Department of Education grants for research, personnel preparation, and technical assistance. This is a major step forward in advocating for the needs of twice-exceptional students (Coleman et al., 2005). Another important provision of IDEA is the change in the way educators identify students with learning disabilities. The presence of a disability will be determined by how a child responds to scientific research-based interventions (Graner, Faggella-Luby, & Fritschmann, 2005). RtI is alleviating many of the current concerns related to the IQ discrepancy model. The focus of RtI is on results and outcomes, not eligibility and process. Students do not have to qualify for special education services before interventions can begin. Interventions can begin as soon as data analysis shows the student is not progressing adequately. No longer will students have to "wait-to-fail" before qualifying for special education services. Response to Intervention is currently being successfully implemented in many states to meet the needs of gifted and twice-exceptional learners as well as students with disabilities.

Summary

Twice-exceptional learners have the characteristics of both gifted students and students with disabilities. Gifted characteristics can mask disabilities and/or the disability can mask the gifted potential so these students appear to have average performance. Stereotypical notions continue to cause twice-exceptional learners to be underserved in an education system that does not understand their needs. These unique learners require support from both gifted and special education specialists in order to achieve their potential. However, identification is problematic because their unique characteristics are atypical of a gifted student and a student with disabilities. With no federal definition, the needs of twice-exceptional students often are overlooked. Response to Intervention is changing the way schools provide services for students with exceptionalities. Chapter 2 will discuss in greater depth the implementation of RtI and how the collaborative problem-solving approach can challenge and support the cognitive, academic, social, and emotional needs of twice-exceptional students.