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Chapter 1

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

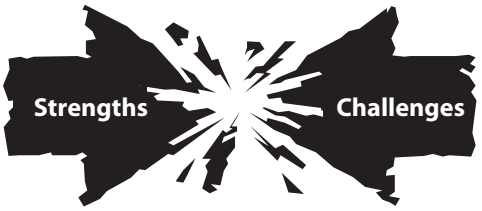
extremes of their abilities and disabilities can create academic, social, and emotional conflicts.

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).



Strengths	Challenges
• superior vocabulary	• easily frustrated
• highly creative	• stubborn
• resourceful	• manipulative
• curious	• opinionated
• imaginative	• argumentative
• questioning	• sensitive to criticism
• problem-solving ability	• inconsistent academic performance
• sophisticated sense of humor	• difficulty with written expression
• wide range of interests	• lack of organization and study skills
• advanced ideas and opinions	• difficulty with social interactions
• special talent or consuming interest	

Figure 1. Frustrations result from conflicting strengths and challenges.

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 makes 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
Cognitive Characteristics
• 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
Academic Characteristics
• 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
Interpersonal Characteristics
• 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 clues • Lacks self-advocacy skills • Disruptive or clowning behavior
Intrapersonal Characteristics
• 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 nonverbal 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 underestimate 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 underachievers 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, Saphire, & 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.

Chapter 2

Response to Intervention

Response to Intervention (RtI) is changing the way schools respond to students who are struggling to learn. Educators are encouraged to intervene earlier on behalf of a greater number of children who are at risk for school failure. RtI gives educators a process for determining whether a child responds to evidence-based interventions and deciding which students need more intensive levels of intervention. RtI emphasizes research-based quality instruction, continuous monitoring of student progress, early intervention for students who are at risk of academic failure, and evidence-based interventions with increasing intensity at higher levels. In particular, the focus on research-based quality instruction will decrease the number of students who are not achieving because of poor instruction rather than an inherent disability (Fuchs & Fuchs, 2005). The systematic approach used by RtI ensures that at-risk students receive timely and effective support when they first begin to experience academic difficulties. No longer will students have to wait to fail before they can qualify for services.

The Association for the Gifted, a division of the Council for Exceptional Children (2009), and the National Association for Gifted Children (n.d.a) recommended in position statements the expansion of RtI to include gifted and twice-exceptional learners. The implementation of RtI throughout the country is substantially impacting identification and services for students with disabilities. RtI specifically addresses the needs of students who are not making adequate progress in school. It is a schoolwide initiative designed to meet the needs of all students, which should include gifted and twice-exceptional learners. This chapter will examine how the RtI multilevel system and the collaborative problem-solving approach can provide the challenge and support necessary to meet the needs of twice-exceptional learners.

Essential Components

Educating students with exceptional needs requires the implementation of programming components to meet their diverse abilities. Universal screenings, systematic assessments, and monitoring of students' progress leads to more effective and earlier identification of those who are at risk of academic failure. Twice-exceptional learners need early interventions for their disabilities and, at the same time, they need interventions that provide additional challenge in their area of giftedness. The components of RtI provide an opportunity to identify gifted students who need additional challenge in order to develop their potential. Gifted education and special education specialists could work with the classroom teacher to implement differentiated instruction.

As educators monitor behavior and implement RtI interventions, they are realizing the relationship between social and emotional needs and students' behavior. Supporting the social and emotional needs of students is equally important, but an often-neglected component in student success. Students who are experiencing social difficulties with personal relationships or showing signs of emotional distress need early intervention and support. Research demonstrates the important role interpersonal relationships and intrapersonal understanding have in student achievement and satisfaction with life (Trail, 2008). Systematic screening to identify students who were experiencing problems with social (interpersonal relationships) or emotional (intrapersonal understanding) areas would result in earlier interventions and, therefore, fewer behavior problems.

Gifted and special education specialists could provide valuable assistance to classroom teachers in addressing the needs of a wider range of students. As universal screening data is reviewed, the needs of all students would be considered. Those students needing additional challenge would be identified as well as students who were not achieving academically or had behavioral issues. As members of the collaborative problem-solving team, both specialists play a vital role in

identifying student needs, selecting interventions, and developing an individual plan for students. The additional support teachers receive from such specialists is beneficial as they implement the plan and monitor student progress. The student's response to the interventions implemented determines the levels of support and tiers of intervention needed to develop their potential further.

Professional Development

In order for any initiative to be successful in its implementation, adequate professional development is necessary. High-quality staff development builds on collaborative reflection and joint action. Schools should provide training for collaborative groups comprised of classroom teachers, gifted and special education specialists, parents, and other specialists such as school psychologists, counselors, behavior specialists, occupational therapists, and administrators. The training should focus on the unique characteristics of twice-exceptional learners, utilizing the RtI problem-solving process to identify diverse needs, select specific interventions to meet those needs, develop a comprehensive plan, and monitor student progress. Allow ample time for the collaborative teams to discuss, reflect, and apply the information they have learned to case studies of students and then to specific students in their schools. In between the training, the teams should have time for implementation and experimentation of the principles they have learned. Follow-up trainings should include reflection on the progress they have made, student successes, and the problems they have encountered. This guided implementation will lead to the best results for twice-exceptional learners.

Collaboration

Classroom teachers need support from both gifted and special educators as well as other education specialists to address the diverse needs of twice-exceptional learners. Research found that the best results are achieved when an individualized plan was developed through a collaborative team effort involving a gifted education specialist, special education specialist, school psychologist, classroom teacher, parents, and the student (Baum, Owen, & Dixon, 1991; VanTassel-Baska, 1991). Occasionally, administrators, counselors, social workers, and occupational or physical therapists are included on the team. The collaborative team members share their expertise as they identify students' needs, determine the level of support students need, select research-based interventions, assist teachers in developing and implementing a plan, and monitor students' progress. The collective knowledge of the team members increases the likelihood that the plan

will be successful in meeting the students' needs. The expertise of each member strengthens the RtI process. The role of each member is summarized below:

Administrator

- Create a positive learning environment that recognizes that students have varied learning needs.
- Set the stage for implementing educational improvements by keeping up-to-date on the latest educational research.
- Provide professional development opportunities for staff members and work with parent organizations to provide training for parents.
- Utilize student assessment data to determine students' needs and use this information to guide instruction.
- Encourage collaboration between classroom teachers, specialists, and parents.
- Play a leading role in conflict resolution by communicating with all parties involved to resolve the issues.
- Provide the financial and educational resources teachers need to be successful.

Classroom Teacher

- Work collaboratively with the gifted education specialist, special education specialist, and other specialists to develop a comprehensive plan for meeting the needs of gifted students, twice-exceptional students, and students with disabilities.
- Utilize student data to guide instruction and ensure students are challenged at an appropriate level.
- Know the parameters of students' Individual Education Programs (IEPs) for special and/or gifted education and 504 Plans. An IEP is mandated by IDEA for students with disabilities. Some states mandate IEPs for gifted students. The 504 Plan refers to Section 504 of the Rehabilitation Act of 1973. It spells out modifications and accommodations students with disabilities need in order to perform at a comparable level to their peers.
- Differentiate classroom instruction to meet individual students' needs and improve educational outcomes for students.
- Consistently monitor the progress of students to identify (a) students who are struggling and (b) students who have learned concepts and need additional challenge.
- Implement evidence-based strategies as needed to promote students' success. Focus on students' strengths and interests.
- Support social and emotional needs of students and consult with a specialist when additional assistance is needed.

Gifted Education Specialist

- Work collaboratively with classroom teachers to analyze assessment data and identify academic, social, and emotional needs of gifted students. Assist classroom teachers in differentiating the curriculum to meet students' needs.
- Advocate for underachieving gifted students and twice-exceptional learners by providing information so teachers will understand why some gifted students do not achieve.
- Collaborate with classroom teachers, the special education team, school psychologists, social workers, counselors, occupational therapists, other specialists, and parents to develop an IEP for twice-exceptional learners.
- Focus on developing the potential of gifted and twice-exceptional learners by using challenging curriculum, strategies to promote higher level thinking, and real-life problem solving instead of providing more of the same.
- Provide opportunities for gifted and twice-exceptional learners to work with peers of similar ability and interests.

Special Education Specialist

- Work collaboratively with classroom teachers to analyze assessment data and identify learning struggles. Assist them in differentiating the curriculum to meet the needs of students with disabilities and twice-exceptional students.
- Advocate for students with disabilities and twice-exceptional learners by providing information to teachers so they will understand the students' disabilities and the effects they have on the students' achievement.
- Collaborate with classroom teachers, gifted education specialists, school psychologists, social workers, counselors, occupational therapists, other specialists, and parents to develop an individualized plan for twice-exceptional learners.
- Assist parents and students in understanding their disabilities, and help students develop compensatory strategies and utilize technology to improve performance.
- Provide explicit instruction on prioritizing, managing assignments, and time management and organizational skills so students will develop needed executive functioning skills.

School Psychologist, Counselor, and/or Social Worker

- Monitor social skill development and assist students in developing appropriate social skills.
- Facilitate the development of socials skills needed to establish and maintain friendships.

- Assist students in learning techniques they can use to approach teachers and become self-advocates.
- Monitor the emotional status of students and provide counseling as needed related to issues of perfectionism, anxiety, stress, depression, self-esteem, and suicide.
- Assist students in developing an understanding and appreciation of their strengths and challenges.

Occupational and/or Physical Therapist

- Monitor physical development and assist students in developing strategies to overcome their deficits in motor learning and coordination.
- Provide support for students with dysgraphia.
- Offer expertise in issues related to sensory integration and recommend research-based interventions as needed.

Home-School Partnership

When educators and parents work together they can transform a child's educational experience (Muscott et al., 2008). Parents can provide valuable insights, because they know their child's strengths, interests, and challenges. They often notice a change in their child's behavior, signaling that something is wrong, before the problem is evident to teachers. Home-school partnerships positively influence attendance, homework completion, and achievement (Henderson, Johnson, Mapp, & Davies, 2006).

Misunderstandings can strain relationships and derail the home-school partnership. School can be a very frustrating experience for twice-exceptional children who have discrepant abilities. For a time they are able to hide their learning difficulties from peers and teachers. However, their behavior at home can indicate a serious problem before it is evident at school. Teachers may not recognize the gifted potential of a child with an undiagnosed disability because the disability masks the gifted potential. To the teacher the child may appear to be just an average student. Although it is easy to understand why a teacher might dismiss parents' concerns, it is difficult for parents to watch helplessly as their children's achievement declines and they disengage from school. Delays in identification and interventions can lead to conflicts between parents and educators. Parents become increasingly frustrated when their concerns are ignored or trivialized. The parents of twice-exceptional learners often are twice-exceptional themselves and have experienced some of the same issues. Memories of negative school experiences increase the parents' determination to make sure their children do not suffer the same fate. These parents can become very demanding and the ensuing battle can be costly for the school, parents, and students.

The following suggestions can be implemented to improve the home-school partnership:

School's Role

- Welcome parent participation in school activities, get to know their strengths, engage them in volunteering at school, and value their contributions to increase educational opportunities for students.
- Work to establish and sustain respectful relationships with parents through two-way communication and shared decision making.
- Assess parent needs and provide the support necessary for them to become partners in facilitating their children's academic progress.
- Listen carefully to parents' concerns and encourage their collaboration in the problem-solving process. Never trivialize or dismiss parents' concerns. Take the time to adequately assess students' abilities to determine if there is a hidden disability.
- Understand the frustration parents of twice-exceptional children experience when their gifted children fail in school. Recognize that some parents also may be twice-exceptional and have had negative school experiences.

Parent's Role

- Value your children's strengths, share in their passions, and model positive ways of dealing with stress and life's challenges.
- Empower your children to develop compensatory strategies for dealing with their disabilities.
- Advocate for your children, but do not rescue them from problems or demand special treatment.
- Encourage your children to become self-sufficient and to learn self-advocacy skills.
- Share your concerns with your children's teachers and help educators to understand issues that are negatively influencing your children's academic achievement.
- Work collaboratively with educators in the problem-solving process, support the implementation of recommended interventions, and utilize suggested strategies at home.
- Seek community organizations and resources to extend educational opportunities outside of school and provide opportunities for your children to work with other students with similar interests and abilities.

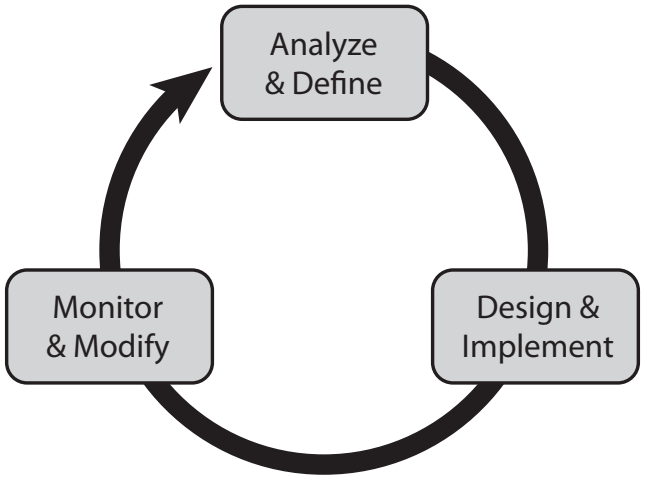


Figure 3. The RtI problem-solving process.

The RtI Problem-Solving Process

RtI utilizes a structured, systematic problem-solving process illustrated in Figure 3. The problem-solving process is a continuous cycle of the following steps for each individual student:

- Analyze the data to determine what is keeping a student from making adequate progress.
- Define the student's academic, social, and emotional needs.
- Design a collaborative plan of interventions to meet the student's needs.
- Implement the plan with fidelity.
- Monitor the student's progress to determine the need for more or less intensive interventions.
- Modify the plan and continue to monitor the student's progress.

The various steps are explained in more detail in the sections that follow.

Analyze and Define

The referring teacher and/or parent initiates the problem-solving process. During the initial consultation, the referring teacher meets with the twice-exceptional consultant and/or the gifted and special education specialist to review the assessment data as a team. A combination of both quantitative and qualitative data is required to provide a comprehensive view of the student. After analyzing the data, the team determines if additional information or assessments are needed to gain a complete understanding of the student's strengths and challenges. The data may include a combination of any of the following: screening, diagnostic,

curriculum-based, achievement, and cognitive assessments; observations; rating scales; portfolios; and interviews with the teacher, parent, and student. After the data are analyzed the problem-solving team determines the student's strengths and challenges and defines the student's academic, social, and emotional needs.

Design and Implement

The problem-solving team works collaboratively to develop a comprehensive plan of interventions that will support and challenge the student. The team is comprised of the referring teacher, twice-exceptional consultant, special education specialist, gifted education specialist, parents, and the student (the student's participation in the process will vary with the student's age and maturity level). A school counselor, social worker, reading specialist, speech/language specialist, occupational therapist, physical therapist, and an administrator may be included based on the student's needs. A home-school partnership increases the chances for success because parents and educators are working together to develop appropriate learning opportunities/interventions at home and school. The comprehensive plan the team develops should provide (a) challenging learning opportunities in areas of the student's strengths; (b) explicit instruction and support in the student's areas of challenge; and if necessary (c) foster interpersonal relationships; and (d) promote intrapersonal understanding. The team identifies the intensity and duration of the intervention. A person is designated to be responsible for implementing the intervention and monitoring the student's progress. The team then works to ensure the plan is implemented with fidelity.

Monitor and Modify

The student's progress is monitored at designated intervals throughout the year. Data from multiple sources will determine the effectiveness of the intervention. The data suggest whether (a) the intervention plan was implemented with fidelity; (b) the plan is achieving the desired results; and (c) the defined academic and affective needs were met. The team meets on a predetermined date to evaluate the student's progress. Decisions are made based on the progress of the student to either (a) maintain interventions, (b) discontinue interventions, or (c) provide more or less intensive interventions. Modifications are made to ensure the student is making adequate progress and is achieving at a level commensurate with his or her ability. Students who are not making adequate progress at the universal level receive small-group interventions and their progress monitoring continues at the targeted level. Those who do not respond to small-group interventions will receive more individualized, intensive interventions based on the tiers described in the next section.

Tiers of Intervention

There are many possible variations to the RtI model, but typically it has tiers of intervention with the intensity of the interventions increasing at each tier (Fuchs & Fuchs, 2005; Graner et al., 2005). Some states have adopted models with distinctive tiers while other states have used a more fluid approach. In the beginning the RtI tiers provided levels of intervention to support students who were not achieving in reading. The intervention tiers were later expanded to other academic areas. When RtI was adopted by special education, the model was expanded to include academic and behavior issues. Here, I have adapted the RtI model to meet the diverse needs of twice-exceptional learners.

Tier 1: Universal Interventions

The first tier focuses on providing high-quality education and differentiated instruction in the general classroom. Assessment, instruction, and monitoring student progress in this tier are the responsibility of the classroom teacher. Highly qualified teachers receive rigorous professional development so they can effectively implement evidence-based curriculum. All students are screened early in the school year to identify individuals who need additional support to meet grade-level standards and those who have already mastered aspects of the grade-level content. Teachers recognize that students learn differently and differentiate instruction according to students' readiness, interests, and learning profiles. Differentiated instruction reflects sound instructional principles and best practices. It provides the support students need to be successful and the challenge they need to keep engaged in the learning process.

Throughout the year, curriculum-based assessments supply data teachers can use to monitor students' individual progress. Diagnostic assessments provide specific information to identify skill deficits and strengths. Longitudinal growth data track the students' academic growth and are valuable in determining if students are achieving a year's growth. Although some students will not achieve a year's growth unless they receive additional support to learn grade-level material, others have already mastered parts or the entire grade-level curriculum. Gifted learners will need additional challenge in order for them to continue to grow commensurate with their ability. Twice-exceptional learners need both support in deficit areas and additional enrichment in their strength areas.

In this tier, teachers understand that interpersonal relationships and intrapersonal understanding influence student achievement and strive to provide a respectful learning environment that values individual differences and learning styles. Every student should be valued for the contributions she makes to the classroom. Teachers must support feelings of empathy and guard against peer bullying and an anti-intellectual climate. At the same time, they should provide

opportunities for students to work with peers who have similar interests and abilities, encouraging students to become involved in school clubs and extracurricular activities. Teachers also must monitor the progress of students who are experiencing difficulties with interpersonal relationships and students who are anxious, depressed, or have low self-esteem.

Tier 2: Targeted Interventions

Students are identified for targeted interventions if they are (a) not progressing adequately in the regular classroom, (b) in need of additional challenge, (c) experiencing difficulties with interpersonal relationships, or (d) showing signs of emotional distress. Twice-exceptional learners have very diverse needs that must be considered when developing an instructional and intervention plan. Focusing only on deficit areas with the intent of fixing students often results in less positive outcomes of depression, lack of motivation, and loss of self-esteem. For this reason it is advantageous for classroom teachers to work collaboratively with specialists from special and gifted education to develop a comprehensive plan of evidence-based instruction and intervention.

Tier 2 evidence-based instruction and interventions are provided in small, flexible groupings within the classroom and across grade levels or pull-out groups. This allows teachers to work with small groups of students where they can focus instruction on individual needs. Small-group instruction affords twice-exceptional students an opportunity to develop higher order thinking skills, problem-solving skills, and research skills while they gain organizational skills or develop fluency skills in other groups. Pull-out friendship groups are valuable in teaching students specific social skills to improve their relationships with peers. Interest groups allow students to explore an area of interest with other students who have similar interests. Twice-exceptional learners can benefit from activities designed to increase awareness and acceptance of strengths and weaknesses. Studying famous people with disabilities is helpful because it helps twice-exceptional learners understand how others have overcome their disabilities and contributed to society. Teachers can coach students in developing realistic long-term goals and in breaking the goal into doable short-term goals. Achieving short-term goals increases the student's self-esteem. As teachers implement these strategies, the student's progress is monitored to determine if the interventions are working. If the student continues to need additional challenge, academic support in deficit areas, and help with problems with personal relationships, or if he is showing signs of emotional distress, he is referred for the intensive interventions at Tier 3.

Tier 3: Intensive Interventions

A collaborative team composed of the classroom teacher, gifted and spe-

cial education specialists, parents, the student, and other education specialists begin the problem-solving process. The team collects qualitative and quantitative data and uses it to make instructional/intervention decisions. They identify the student's strength and weaknesses, and the variables that are influencing the student's achievement. A comprehensive plan of evidence-based interventions is developed, the plan is implemented with fidelity, and the student's progress is monitored to ensure his needs are being met. The formal special education eligibility evaluation begins when it is determined that more intensive interventions are necessary for the student to be successful. Parents are informed of their due process rights and procedural safeguards specified in IDEA are followed. For twice-exceptional learners it is extremely important to develop a comprehensive plan that addresses their cognitive and academic needs as gifted students and students with disabilities, as well as their social and emotional needs.

Tiers of Intervention for Twice-Exceptional Learners

Possible interventions for twice-exceptional learners to meet their academic, social, and emotional needs are shown in Figure 4. Increasingly, intervention specialists are finding a link between underachievement and behavioral issues. Likewise, behavioral interventions are more successful when the social and emotional needs of the students are considered. Behavioral interventions for twice-exceptional learners include strategies to address their social needs for interpersonal relationships with peers, parents, and teachers and their emotional needs related to intrapersonal understanding.

Summary

Response to Intervention is changing the way the educational needs of students with disabilities and gifted students are identified for interventions. No longer will students with disabilities have to wait to fail before they receive the interventions and supports they need to become successful learners. Early interventions could reduce the frustration these students experience and prevent the social and emotional issues that can develop when they fail to meet their own expectations and the expectations of others. Professional collaboration between classroom teachers, gifted education specialists, and special education specialists are necessary to differentiate the instruction and develop interventions to meet the diverse needs of twice-exceptional learners. A home-school partnership is essential to provide the support at home and in the classroom that twice-exceptional learners need to be successful. Chapter 3 will provide a structured approach that can be used to develop an individualized plan for twice-exceptional learners.

Tier 1: Universal Level Interventions for Twice-Exceptional Learners

- The universal level focuses on what is happening in the general classroom.
- It seeks to ensure that all students receive high-quality differentiated instruction, taught by "highly qualified" teachers, using evidence-based curriculum and instructional practices.
- Universal screening, diagnostic assessments, and progress monitoring are used to guide instruction and intervention decisions.
- Students are referred for targeted interventions when they are:
  - » not progressing adequately in the regular classroom,
  - » in need of additional challenge,
  - » experiencing difficulty with personal relationships, or
  - » showing signs of emotional distress.

Academic Interventions		Behavioral Interventions	
Interventions to Support Academic Achievement	**Interventions to Nurture Gifted Potential**	**Interventions to Foster Interpersonal Relationships**	**Interventions to Promote Intrapersonal Understanding**
• Universal screening and progress monitoring to identify those at risk • Student referral for targeted interventions before they experience significant failure • Preassessment to design instruction • Differentiated curriculum, instruction, and assessment • Implementation of evidence-based interventions including flexible grouping • Choice in assignments so students can use their strengths to demonstrate what they have learned • Monitoring of student progress to document growth and make sure all students are developing needed skills	• Universal screening and progress monitoring to determine those students who need additional challenge • Preassessment to design instruction • Differentiated curriculum, instruction, and assessment • Implementation of research-based interventions including flexible grouping, faster-paced instruction, and opportunities to explore issues in greater depth and complexity • Choice in assignments that allows students to explore areas of interest and become the class expert • Monitoring of student progress to document growth and make sure each student is experiencing a year's growth	• Universal screening and progress monitoring to identify those students who are having problems with interpersonal relationships • Respectful environment that values individual differences • Guards against peer bullying and anti-intellectual climate • Supportive, encouraging teachers • Opportunities to work with peers with similar interests and abilities • Involvement in school clubs and interest groups • Monitoring to make sure students are developing social skills	• Universal screening and progress monitoring to identify those students who have discrepancy in skills and performance, low self-esteem, dysfunctional perfectionism, unrealistic expectations, anxiety, or depression • Individual differences and learning styles valued • Facilitation of understanding of personal strengths, interests, and weaknesses • Encouragement of feelings of empathy • Development of positive self-esteem • Monitoring of students who are at risk of anxiety, depression, or low self-esteem

Figure 4. Interventions for twice-exceptional learners at each tier of RtI.

Figure 4, continued

Tier 2 : Targeted Interventions for Twice-Exceptional Learners

- Supplemental instruction and interventions are implemented when the student begins to struggle and include:
  - » small-group instruction, and
  - » lower student-teacher ratio.
- Evidence-based high-quality instruction and interventions are matched to learner's needs.
- Flexible grouping within classroom or across grade level(s) and pull-out classes are use for supplemental instruction.
- Universal screening, diagnostic assessments, and progress monitoring are used to guide instruction and intervention decisions.
- The student progresses to intensive interventions of Tier 3 if they are:
  - » not progressing adequately,
  - » in need of additional challenge,
  - » experiencing difficulty with personal relationships, or
  - » showing signs of emotional distress.

Academic Interventions		Behavioral Interventions	
Interventions to Support Academic Achievement	**Interventions to Nurture Gifted Potential**	**Interventions to Foster Interpersonal Relationships**	**Interventions to Promote Intrapersonal Understanding**
• Systematic assessments and progress monitoring • Flexible grouping for instruction within classroom and across grade levels • Collaborative planning with gifted and special education specialists to implement evidence-based instruction and interventions • Supplemental instruction for a specific length of time, intensity, and duration • Evidence-based interventions to help students develop fluency and automaticity • Skill development in prioritizing, organization, study skills, and time management	• Systematic assessment and progress monitoring • Flexible grouping for instruction within classroom and across grade levels • Focus on developing individual strengths and interests • Collaborative planning with gifted education specialist to design and implement strength-based challenges • Implementation of evidence-based interventions such as small-group instruction, pull-out programs, and small-group or independent study projects • Honors and AP classes • Emphasis on critical and creative thinking and problem solving	• Systematic assessment and progress monitoring • Friendship groups to aid students in developing social skills, peer relationships, and maintaining friendships • Instruction on self-advocacy skills • Family assistance in learning to empower verses enable children • Opportunities to work with intellectual peers • Affiliations in extracurricular activities encouraged • Referrals of students who are showing signs of isolation to group counseling	• Systematic assessment and progress monitoring • Development of personal awareness, understanding, and acceptance • Understanding that success is a result of effort rather than ability • Rubrics utilized and process of self-evaluation facilitated • Coaching for students in learning to set realistic long-term goals and to break these goals into short-term goals • Celebration of attainment of individual goals and self-actualization

Figure 4, continued

Tier 3: Intensive Interventions for Twice-Exceptional Learners

- A collaborative team uses the problem-solving approach to define the problem and to identify the variables that are contributing to the problem.
- A comprehensive plan is developed by the team to address the student's cognitive, academic, social, and emotional needs.
- Diagnostic assessments and progress monitoring are used to determine if students are making adequate progress.
- Assessment data guides instructional and intervention decisions.
- Intensive interventions include:
  - » small-group and individualized instruction and interventions,
  - » formal identification for special education services, and
  - » procedural safeguards as required by IDEA 2004.

Academic Interventions		Behavioral Interventions	
Interventions to Support Academic Achievement	**Interventions to Nurture Gifted Potential**	**Interventions to Foster Interpersonal Relationships**	**Interventions to Promote Intrapersonal Understanding**
• Collaborative problem solving used to design and implement evidence-based instruction and interventions • Intensive, systematic specialized instruction and interventions • Formal and individualized special education eligibility evaluation • Parents informed of due process rights • Procedural safeguards as required by IDEA 2004 • Systematic assessments and progress monitoring	• Evidence-based interventions that include acceleration, dual enrollment, radical acceleration, or early college entrance • Magnet classrooms and schools designed for gifted students • Independent study projects to give students an opportunity to study a topic in greater depth. • Coaching for students in developing the habits of mind of practicing professionals • Apprenticeships to enable students to gain real-world experiences • Mentors to provide valuable guidance	• Opportunities to work with intellectual peers • Specialized counseling is necessary to assist student in dealing with intensities, sensitivities, feelings of being different, and isolation • Explicit instruction to help students improve relationships with peers, teachers, and family. • Teaching of skills students need to become self-advocates • Facilitation of mentorships and/or apprenticeships	• Specialized counseling for students who are exhibiting signs of anxiety, dysfunctional perfectionism, depression, stress, or suicidal tendencies • Assistance for students in gaining awareness, understanding, and acceptance of their strengths and challenges • Studies of famous people with similar disabilities • Development of self-regulation, locus of control, and attainment of personal goals • Teaching of coping strategies