

BEST PRACTICES IN THE IDENTIFICATION OF GIFTED STUDENTS WITH LEARNING DISABILITIES

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In recent years, researchers and practitioners have become increasingly interested in students who have both learning disabilities and intellectual gifts. Intellectually gifted students are defined as those who demonstrate outstanding ability to grapple with complexity, or superior academic potential. The definition of learning disability states that the level of performance in a particular academic area is substantially below what would be expected based on one's general intellectual ability and that this incongruity cannot be explained by lack of educational opportunity in that academic area. This article explores several controversial issues surrounding the identification of students as both gifted and learning disabled. How does a discrepancy manifest itself in a student who is intellectually gifted? Do gifted students with learning disabilities experience masking effects? How can we effectively identify intellectually gifted students with learning disabilities? In addition, we argue against the use of profile analysis to identify gifted students with learning disabilities. Finally, we propose guidelines for school psychologists to identify students with intellectual gifts and learning disabilities, and we provide suggestions for how to best serve this unique population of students within the school environment. © 2001 John Wiley & Sons, Inc.

The definitions of intellectual giftedness and learning disability are not without ambiguity and controversy. The terms are in a state of continuous modification and adjustment; therefore, obtaining a clear definition of children who are simultaneously intellectually gifted and learning disabled is a difficult proposition (Brody & Mills, 1997). The primary purpose of this article is to provide an argument against using profile analysis to identify gifted students with learning disabilities, and to establish alternative criteria for their identification.

DEFINITION OF INTELLECTUAL GIFTEDNESS

The continuing evolution of the definition of giftedness encompasses an increasingly more diverse set of capabilities and consequently includes a greater number of children (Borland, 1989; Renzulli, 1978; Renzulli & Reis, 1985). Many contemporary definitions of giftedness argue against the use of the unitary full-scale IQ score in favor of more specific attributes. These include Gardner's (1993) multiple intelligences, the three-ring conception of giftedness (Renzulli, 1978), and Sternberg's (1988) triarchic theory of intelligence. Perhaps the most inclusive definition of giftedness is that expressed by the U.S. Department of Education (1993), which states:

Children and youth with outstanding talent 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 capability in intellectual, 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. (p. 26)

The exhaustive nature of the definition makes it difficult to operationalize and utilize in schools. While giftedness may encompass a wide variety of talent areas, a fundamental function of schools is to develop students' academic potential. Therefore, in the remainder of this article, we

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consider only one form of giftedness: intellectual giftedness. However, we acknowledge the existence and importance of other theories of giftedness.

Because there is no universally agreed upon definition of intellectual giftedness (Davis & Rimm, 1994), it is the school district's implicit or explicit definition that determines eligibility for specialized services. Therefore, criteria needed to identify intellectual giftedness vary as a function of state or school district, thus preventing comparisons. This phenomenon is sometimes called "geographic giftedness" (Borland, 1989). Many school districts choose to define giftedness as general intellectual ability, or the potential for exceptionally high performance on academic tasks. A common method of doing so involves the use of an IQ test such as the Wechsler scales (Wechsler, 1991). Some states (e.g., Pennsylvania) require the use of an IQ test in combination with other criteria to determine giftedness.

For this article, we define intellectual giftedness as an outstanding ability to grapple with complexity. Further, this general cognitive ability should be assessed using the most psychometrically sound indices available, such as individually administered IQ tests (e.g., Wechsler scales). Arbitrarily circumscribing the rarity of "gifted" ability is controversial and debatable. For instance, Terman's (1925) children evidenced a mean full-scale IQ of 150. Historically, the 98th percentile, two standard deviations above the mean, or a full-scale IQ of 130 or above, has been employed to designate students as intellectually gifted. However, some states and districts consider IQ scores in the 120s to be indicative of intellectual giftedness. Furthermore, contemporary views of intellectual giftedness posit that these abilities represent more than quantitative differences in general cognitive ability. Intellectually gifted children "not only develop more rapidly than typical children, but also appear to be qualitatively different" (Winner, 2000, p. 153). These qualitative differences suggest that gifted children possess an intense drive to master new concepts, require little explicit instruction, and often pose deep philosophical questions (Winner).

DEFINITION OF LEARNING DISABILITY

The United States Office of Education (USOE, 1977) defined a specific learning disability as

... a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, speak, read, write, spell, or do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Such terms do not include children who have learning difficulties that are primarily the result of visual, hearing, or motor handicaps, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage. (p. 65083)

An individual with a learning disability exhibits a significant discrepancy between his or her level of performance in a particular academic area and his or her general intellectual ability. This discrepancy cannot be explained by lack of educational opportunity in that academic area or other health impairment. Further, learning disabilities may differentially affect all areas of knowledge acquisition. Finally, there are variable degrees of severity of learning, and learning disabilities can exist in children of all ability levels.

Most states include some mention of "processing deficits" in their definition or identification criteria (Mercer, Jordan, Allsop, & Mercer, 1996). However, exactly what qualifies as a processing deficit remains vaguely defined. Usually, processing deficits include problems in the areas of perceptual-motor, psycholinguistic, and executive functioning (Mercer et al.). These deficits may be documented through the use of tests of processing ability or neuropsychological batteries.

DEFINITION OF GIFTED/LEARNING DISABILITY

Gifted/learning disabled students are students of superior intellectual ability who exhibit a significant discrepancy in their level of performance in a particular academic area such as reading, mathematics, spelling, or written expression. Their academic performance is substantially below what would be expected based on their general intellectual ability. As with other children exhibiting learning disabilities, this discrepancy is not due to the lack of educational opportunity in that academic area or other health impairment. Because academically gifted students with learning disabilities demonstrate such high academic potential, their academic achievement may not be as low as that of students with learning disabilities who demonstrate average academic potential. Consequently, these students may be less likely to be referred for special education testing (Brody & Mills, 1997).

The literature in this area suggests that there are three different types of gifted/learning-disabled students (Baum, Owen, & Dixon, 1991; Brody & Mills, 1997; Gunderson, Maesch, & Rees, 1987). The first type, gifted students with subtle learning disabilities, often do well in elementary school and participate in gifted programs. However, as work becomes more contingent on the students' area of disability, they may begin to experience learning problems and periods of underachievement. Because these students exhibit above average achievement in elementary school, these students are rarely identified as learning disabled. The second type of student is identified as learning disabled, but is also gifted. These students have severe learning disabilities, but they may also have superior aptitudes in one or more academic or intellectual areas, though they are rarely formally identified as gifted. The third type of gifted/learning-disabled student remains unidentified as either learning disabled or gifted. These students have disabilities that conceal their gifts and gifts that camouflage their disabilities. These students appear average to their teachers. They are probably not referred for psychoeducational evaluation; therefore, the discrepancy between their IQs and academic performance is not noted. They perform at grade level on most academic tasks, but their learning disability hinders them from reaching the superior range of performance. We will explore the assumptions underlying this typology in greater detail.

The concept that intellectual giftedness masks learning disabilities and that learning disabilities mask giftedness is a central tenet within the current literature in the field of gifted education. Masking refers to the principle that many gifted students with learning disabilities have patterns of strengths and weaknesses that make them appear to have average abilities and achievement. Masking hinders the identification of these students as both gifted and learning disabled. Proponents of masking would argue that, to a certain extent, all three types of gifted/learning disabled students experience masking; however, the masking is most severe for the third type of gifted student, the child who is identified as neither gifted nor learning disabled. Some proponents of masking believe that even intelligence test scores will be depressed for students who are gifted and learning disabled, thereby hindering their identification as either gifted or learning disabled. For instance, Waldron and Saphire (1990) stated that "the primary problem with the use of an intelligence test to identify gifted students with LD is that the disability may lower their IQ score so dramatically that the students do not qualify for inclusion in the school district's criteria for gifted, even though they demonstrate strong abilities in some areas." (p. 491)

The notion of masking is fraught with theoretical and pragmatic problems. A central theoretical question is whether or not students who are performing at an average level should qualify for services as learning disabled (Gordon, Lewandowski, & Keiser, 1999). Although these students may exhibit relative discrepancies between their potential and their performance, they do not exhibit performance deficits when compared to same age peers. For example, consider Ronald, a

student who scores 145 on the WISC-III, but who is performing at the 50th percentile when compared to same-age peers. Ronald does show a significant discrepancy between ability and achievement, even if his achievement seems average for students his age. We believe that students like Ronald who achieve at average levels should be considered for the diagnosis of gifted/LD if they show evidence of superior potential and evidence of processing deficits. However, we also assert that students with high measured ability who achieve at an average level may or may not be learning disabled. Many other factors influence students' academic achievement. Cognitive ability is an imperfect predictor of academic achievement in that it accounts for approximately 50% of the variance (N. Brody, 1992). There are many reasons that a student does not perform at the level of his or her estimated ability. Motivation level, interest, self-efficacy, self-regulation skills, and other noncognitive factors also contribute to academic success (Bandura, 1997; Gordon et al., 1999; Reis & McCoach, 2000; Siegle, 2000). "If achievement depends on other normally distributed abilities in addition to ability, such as motivation, interest, energy, and persistence, and if all these factors act multiplicatively, then theoretically, we should expect achievement to show a positively skewed distribution" (Jensen, 1980, p. 97). Jensen concludes, "it is probably more correct to say that a person's achievements are a *product*, rather than a *summation*, of his or her abilities, disposition, and training" (p. 98, emphasis in the original).

There are also statistical reasons for disparities between ability and achievement at the highest ability levels. The phenomenon of regression to the mean posits that extreme scores will tend to shift toward the middle of the distribution (Campbell & Kenny, 1999). Given regression toward the mean, we would expect the achievement scores of students who scored in the top 2% of the ability distribution to be lower than their ability scores would indicate. Therefore, at the highest levels of measured ability, we would not necessarily expect all students to demonstrate equally high levels of achievement. In part, the masking argument relies upon the primacy of ability in determining consequent educational achievement. In reality, students of high ability who perform at average levels may or may not exhibit learning disabilities (Reis & McCoach, 2000).

There are practical problems with the concept of masking as well. If this masking of students' potential does occur, what signs should teachers look for to identify these students? How should school psychologists identify this phenomenon? The concept of masking, although intuitively appealing, creates pragmatic problems for school psychologists. Realistically, we cannot screen all children who are performing at average levels to assess for the possibility of hidden learning disabilities. At the present time, no substantive suggestions exist for identifying these hidden learning-disabled students within the school population until they begin underachieving. Future research should focus on documenting the existence of these students and identifying their distinguishing characteristics so that practitioners may identify students who are at risk for hidden learning disabilities. However, presently, there is very little empirical research to guide the identification of these masked gifted/learning disabled students.

Some advocates of the masking concept argue that a gifted student's learning disability attenuates his or her true IQ score (Fox & Brody, 1983; Tannenbaum & Baldwin, 1983; Waldron & Saphire, 1990), thus preventing the student from obtaining scores in the superior range on an individually administered IQ test. These authors suggest that variability within the subtests may indicate the presence of a learning disability, and that if one or more of the subtests is in the superior range, the student may be gifted and learning disabled. Fox and Brody further state that, on the WISC-R, "high scores on parts of the test may suggest giftedness, while poor performance in other areas suggests disability" (p. 105). Again, although this idea may be intuitively appealing, it becomes problematic for practitioners who work with the child. IQ tests lack treatment validity. They do not provide any information about how to best serve a student within an educational

setting. To use the IQ test to provide the sole indication of a student's masked learning disability provides the practitioner with no practical suggestions for how to best meet the student's educational needs. In addition, school psychologists should never use only one assessment instrument to assess for the presence of learning disabilities (Baum et al., 1991).

The Case Against Using Profile Analysis With Gifted/Learning Disabled Students

Historically, there has been a strong and enduring belief in the existence of multiple and distinct intellectual abilities (Kehle, Clark, & Jenson, 1993). From Thurstone to Gardner, the theory of multiple intelligences has continued to influence intellectual assessment. In addition, the Wechsler IQ scales contain 10 to 13 distinct subtests, undoubtedly influencing school psychologists' belief in the interpretability of distinct subtest profiles (Kehle et al.). The subtests on the Wechsler scales appear to measure divergent content, and most educators intuitively believe that students display unique patterns of strengths, weaknesses, and learning styles. Therefore, educators and psychologists often feel tempted to use the subtest scores to reveal a student's unique pattern of cognitive strengths and weaknesses. Profile analysis refers to the practice of interpreting differences among subtests as evidence of differential and distinct pattern of cognitive functioning in a student. Many practitioners continue to interpret the profile of subtest scores, even in the face of overwhelming empirical research that cautions against such practice (Kavale & Forness, 1984; Kramer, Henning-Stout, Ulman, & Schellenberg, 1987; McDermott, Glutting, Jones, Watkins, & Kush, 1989; Sattler, 1992; Truscott, Narrett, & Smith, 1993).

The arguments presented by Bray, Kehle, and Hintze (1998) against the use of profile analysis in psychoeducational diagnoses are also applied here as arguments against the diagnosis as gifted/learning disabled using similar procedures. They also suggest that profile analysis should not be employed because "individual subtests are not as reliable as deviation IQs and/or factor scores as indicated by their corresponding reliability and stability coefficients, standard error of measurement (SE_m), and confidence intervals. . ." (p. 211).

Further, as stated by Bray et al. (1998), even with the use of the most rigorous .01 level of significance to lower the probability of a Type I error, any statistically significant differences among subtests may be quite common occurrences in children's patterns of scores, and consequently of little practical significance. For example, Bray et al. noted that "a difference of 11 points between the verbal and performance scales is significant at the .05 level for all ages, but it occurs in 40.5 percent of the standardization sample on the WISC III (Wechsler, 1991)" (p. 212).

Also, Jensen (1992) argued that profile analysis uses ipsative scores and therefore removes generalized variance; consequently g is substantially diminished. According to Watkins and Kush (1994), the use of ipsative score analysis is simply an inappropriate method to interpret test results. Although the full-scale IQ score is remarkably stable, there is variability in the profile as a result of the lower reliabilities of the individual subtests. Consequently, a particular profile does not represent a particular disorder such as a learning disability (Truscott et al., 1993; Watkins & Kush, 1994).

Using profile analysis to identify students as both gifted and learning disabled can be especially problematic. There is evidence to suggest that the scaled score range among subtests increases as the full-scale IQ score increases (Patchett & Stansfield, 1992) and that subtest scatter increases with as the value of the highest subtest score rises (Schinka, Vanderploeg, & Curtiss, 1997). If these findings are true, then intellectually gifted children would display more atypical and scattered profiles than other students. Therefore, profile analysis would capitalize on chance variability, and would be especially inappropriate for students of superior ability. Waldron and Saphire (1990) found that both gifted students and gifted/learning disabled students showed strengths in

the similarities subtest and deficits in digit span. They also noted that neither examining verbal/performance discrepancies nor rank ordering the WISC-R subtests provided an effective method of identifying or documenting the existence of a learning disability. Therefore, there appears to be even greater evidence to refute the use of profile analysis with gifted or gifted/LD students than there is for the general school population.

Recommended Best Practice for Identifying Gifted Students with Learning Disabilities

In previous sections of this article, we have outlined problems inherent in the current methods used to identify students as both gifted and learning disabled. Based on this research and our personal experiences, we propose several guidelines for identifying gifted students who exhibit learning disabilities. First, the identification of gifted students with learning disabilities should parallel the identification of all other students with learning disabilities. Naturally, the process must be in compliance with both federal and State special education regulations. In addition, practitioners must utilize reliable indices of both ability and achievement, and they must employ appropriate methods to document a discrepancy between measured ability and achievement. To assess academic achievement, we recommend that school psychologists collect a child's current level of functioning within the classroom environment as well as standardized measures of achievement. Measures of achievement within the classroom could include, but are not limited to, curriculum-based assessments, informal reading inventories, permanent product reviews of a student's written work, and portfolio reviews. We discourage the use of profile analysis to detect the presence of learning disabilities in students under any circumstances. Currently, there is little empirical evidence to support the concept of masking. However, to conduct empirical research on students with hidden gifts and/or learning disabilities, we must find a defensible way to identify such students.

How should gifted students with learning disabilities be identified? Using a complete assessment battery to identify and plan interventions for gifted students with learning disabilities is critical. This assessment should consist of behavioral observations, an individual intelligence test, measures of cognitive processing, and a full achievement battery (Brody & Mills, 1997). In addition, evaluations should include measures of the student's functional level within the district's curriculum in any areas of suspected disability.

To aid in the screening and identification of gifted students with learning disabilities, we propose examining achievement and academic performance longitudinally. The standardized achievement test scores of gifted students with learning disabilities may decline over time as the specific learning disability exerts an increasingly greater influence on their academic achievement. For example, gifted students who exhibit specific reading disabilities may demonstrate exceptional academic achievement during the primary grades; however, they may experience greater and greater difficulty in school, as assignments become more reading intensive (Reis, Neu, & McGuire, 1997; Rosner & Seymour, 1983). Therefore, gifted students with learning disabilities may show a pattern of declining achievement test scores and classroom grades coupled with indicators of superior cognitive abilities. Educators should screen for this pattern of declining achievement by reviewing the standardized achievement test scores of students in a longitudinal manner. Larger than expected declines in academic achievement in one or more subject areas across grade levels could be cause for concern. Screening students who exhibit declining achievement test scores over the first 3 to 5 years of formal schooling may be an effective way to identify students with above average to superior cognitive abilities who also exhibit learning disabilities. Any children who appear to exhibit patterns of declining achievement would be referred for further assessment. This screening process could lead to earlier intervention for such students, and

might result in better long-term educational outcomes for these bright students with learning disabilities. Empirical research is needed to ascertain whether this longitudinal screening method aids in the early detection of gifted students with hidden learning disabilities. However, we believe that this approach is more justifiable than using profile analysis to identify gifted students with masked learning disabilities.

Using this system will probably also produce false positive referrals. Therefore, it is important to try to identify the cause a student's underachievement using a formal psychoeducational assessment. Otherwise, "diagnoses separating gifted students who exhibit learning difficulties into subgroups of those with learning disabilities, those with normal variation in cognitive development, and those who are unmotivated for a variety of reasons can be problematic" (Brody & Mills, 1997, p. 287).

Interventions for Gifted Students With Learning Disabilities

All students with learning disabilities should have opportunities to develop their talents and engage in activities that further enhance their areas of strength (Baum et al., 1991). In addition, all students should have opportunities for choice- and interest-based activities within the school day (Renzulli & Reis, 1985). Gifted students with learning disabilities are no exception. Many gifted students with learning disabilities exhibit uneven patterns of classroom and academic performance across subject areas or domains. Gifted students with learning disabilities have exceptional cognitive abilities and talents that should be nurtured as they learn how to effectively compensate for their disabilities (Baum, Emerick, Herman, & Dixon, 1989; Baum et al., 1991). These students must have ample opportunities for enrichment as well as remediation. In some cases, gifted students with specific learning disabilities may be best served by grade acceleration in one academic area while receiving remediation in another academic area. For example, a child with very superior cognitive abilities and a learning disability in reading may need special services in the reading area. At the same time, this student's ability to think abstractly, grasp concepts quickly, and grapple with complexity may manifest itself in outstanding abilities in the area of mathematics. Even though the child may have difficulty with reading tasks, he or she may be capable of working several years above grade level in another area such as mathematics (Brody & Mills, 1997). Educators should allow a gifted student with learning disabilities to work at an appropriate level in each subject area, even if this results in grade level asynchronies within the student's educational program. Finally, special education teachers, school psychologists, and support staff may require extra training to work with students who display such large discrepancies in their academic achievement across their areas of relative strength and weakness (Brody & Mills).

The identification of a learning disability requires documenting a discrepancy between ability and achievement. Because students who are intellectually gifted display superior cognitive ability, their academic achievement may not be as low as that of students who display average intellectual ability, yet both groups of students would qualify for services as learning disabled. Students with superior cognitive abilities who exhibit learning disabilities may be performing only slightly below grade level in their area of disability, whereas other students with learning disabilities may be functioning substantially below grade level. Because of their qualitative differences (Winner, 2000), gifted students with learning disabilities may require different instructional interventions from other children with learning disabilities. Therefore, it may be inappropriate to place gifted students with learning disabilities into special classes or traditional instructional programs designed for students with learning disabilities (Reis et al., 1997). Many gifted students with learning disabilities may be best served by receiving extra, differentiated support within the regular edu-

cation setting. Gifted children with learning disabilities may exhibit unique social and emotional needs that require differentiated counseling and support services (Mendaglio, 1993).

CONCLUSION

The identification of gifted students as learning disabled has received increasing attention in recent years. Although recommendations for identification of these students exist, they are based on clinical practice and professional judgment rather than empirical research. Currently, there is a dearth of research on identifying gifted students with learning disabilities. In addition, federal laws mandate using certain procedures to identify students with disabilities. Therefore, we recommend using the already established federal and state identification criteria to identify gifted/learning disabled students until sufficient evidence exists to create differential identification procedures for these students. The use of profile analysis to identify a student as either gifted, learning disabled, or gifted/LD is not warranted, based on current research. Utilizing longitudinal data collection to identify declines in achievement across the primary and elementary years may allow educators to identify high-ability students with learning disabilities. Finally, more empirical research is needed to determine whether different subsets of gifted students with learning disabilities exist, and how to best identify and serve this unique population of students with learning disabilities.

REFERENCES

- Bandura, A. (1997). *The exercise of control*. New York: W.H. Freeman and Company.
- Baum, S., Emerick, L.J., Herman, G.N., & Dixon, J. (1989). Identification, programs, and enrichment strategies for gifted learning disabled youth. *Roeper Review*, 12, 48–53.
- Baum, S.M., Owen, S.V., & Dixon, J. (1991). *To be gifted and learning disabled*. Mansfield, CT: Creative Learning Press.
- Borland, J.H. (1989). *Planning and implementing programs for the gifted*. New York: Teachers College Press.
- Bray, M.A., Kehle, T.J., & Hintze, J.M. (1998). Profile analysis with the Wechsler Scales: Why does it persist? *School Psychology International*, 19, 209–220.
- Brody, L.E., & Mills, C.J. (1997). Gifted children with learning disabilities: A review of the issues. *Journal of Learning Disabilities*, 30, 282–296.
- Brody, N. (1992). *Intelligence* (2nd ed.). San Diego, CA: Academic Press, Inc.
- Campbell, D.T., & Kenny, D.A. (1999). *A primer on regression artifacts*. New York: The Guilford Press.
- Davis, G.B., & Rimm, S.B. (1994). *Education of the gifted and talented* (3rd ed.). Boston: Allyn & Bacon.
- Fox, L.H., & Brody, L. (1983). Models for identifying giftedness: Issues related to the learning disabled child. In L.H. Fox, L. Brody, & D. Tobin (Eds.), *Learning disabled/gifted children: Identification and programming* (pp. 101–116). Baltimore, MD: University Park Press.
- Gardner, H. (1993). *Multiple intelligences: The theory in practice*. New York: Basic Books.
- Gordon, M., Lewandowski, L., & Keiser, S. (1999). The LD label for relative functioning students: A critical analysis. *Journal of Learning Disabilities*, 32, 485–490.
- Gunderson, C.W., Maesch, C., & Rees, J.W. (1987). The gifted learning disabled student. *Gifted Child Quarterly*, 31, 158–160.
- Jensen, A.R. (1980). *Bias in mental testing*. New York: The Free Press.
- Jensen, A.R. (1992). Commentary: Vehicles of g. *Psychological Science*, 3, 275–278.
- Kavale, K.A., & Forness, S.R. (1984). A meta-analysis of the validity of Weschler Scale profiles and recategorizations: Patterns or parodies? *Learning Disabilities Quarterly*, 7, 136–156.
- Kehle, T.J., Clark, E., & Jenson, W.R. (1993). The development of testing as applied to school psychology. *Journal of School Psychology*, 31, 143–161.
- Kramer, J.J., Henning-Stout, M., Ulman, D.P., & Schellenberg, R.P. (1987). The viability of scatter analysis on the WISC-R and the SBIS: Examining a vestige. *Journal of Psychoeducational Assessment*, 5, 37–47.
- McDermott, P.A., Glutting, J.J., Jones, J.N., Watkins, M.W., & Kush, J. (1989). Core profile types in the WISC-R national sample: Structure, membership, and applications. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 1, 292–299.

- Mendaglio, S. (1993). Counseling gifted learning disabled: Individual and group counseling techniques. In L.K. Silverman (Ed.), *Counseling the gifted and talented* (pp. 131–149). Denver, CO: Love Publishing Company.
- Mercer, C.D., Jordan, L., Allsop, D.H., & Mercer, A.R. (1996). Learning disabilities definitions and criteria used by state education agencies. *Learning Disability Quarterly*, 19, 217–232.
- Patchett, R.F., & Stansfield, M. (1992). Subtest scatter on the WISC-R with children of superior intelligence. *Psychology in the Schools*, 29, 5–11.
- Reis, S.M., & McCoach, D.B. (2000). The underachievement of gifted students: What do we know and where do we go? *Gifted Child Quarterly*, 44, 152–170.
- Reis, S.M., Neu, T.W., & McGuire, J.M. (1997). Case studies of high ability students with learning disabilities who have achieved. *Exceptional Children*, 63, 463–479.
- Renzulli, J. (1978). What makes giftedness? Reexamining a definition. *Phi Delta Kappan*, 60, 180–184.
- Renzulli, J.S., & Reis, S.M. (1985). *The schoolwide enrichment model: A comprehensive plan for educational excellence*. Mansfield, CT: Creative Learning Press.
- Rosner, S.L., & Seymour, J. (1983). The gifted child with a learning disability: Clinical evidence. In L.H. Fox, L. Brody, & D. Tobin (Eds.), *Learning disabled/gifted children: Identification and programming* (pp. 77–97). Baltimore, MD: University Park Press.
- Sattler, J.M. (1992). *Assessment of children* (3rd ed.). San Diego, CA: Author.
- Schinka, J.A., Vanderploeg, R.D., & Curtiss, G. (1997). WISC-III subtest scatter as a function of the highest subtest score. *Psychological Assessment*, 9, 83–88.
- Siegle, D. (2000, December). Parenting achievement oriented children. *Parenting for High Potential*, pp. 6–7, 29–30.
- Sternberg, R.J. (1988). *The triarchic mind: A new theory of human intelligence*. New York: Viking Penguin, Inc.
- Tannenbaum, A.J., & Baldwin, L.J. (1983). Giftedness and learning disability: A paradoxical combination. In L.H. Fox, L. Brody, & D. Tobin (Eds.), *Learning disabled/gifted children: Identification and programming* (pp. 11–36). Baltimore, MD: University Park Press.
- Terman, L.M. (1925). *Genetic studies of genius: Vol. 1. Mental and physical traits of a thousand gifted children*. Stanford, CA: Stanford University Press.
- Truscott, S.D., Narrett, C.M., & Smith, S.E. (1993). WISC-R subtest reliability over time: Implications for practice and research. *Psychological Reports*, 74, 147–156.
- United States Office of Education. (1977). *Assistance to states for education for handicapped children: Procedures for evaluating specific learning disabilities*. Federal Register, 42, 62082–62085.
- U.S. Department of Education. (1993). *National excellence: A case for developing America's talent*. Washington DC: Author.
- Waldron, K.A., & Saphire, D.G. (1990). An analysis of factors for gifted students with learning disabilities. *Journal of Learning Disabilities*, 23, 491–498.
- Watkins, M.W., & Kush, J.C. (1994). Wechsler subtest analysis: The right way, the wrong way, or no way? *School Psychology Review*, 23, 640–651.
- Wechsler, D. (1991). *Manual for the Wechsler Intelligence Scale for Children—III*. San Antonio, TX: The Psychological Corporation.
- Winner, E. (2000). Giftedness: Current theory and research. *Current Directions in Psychological Science*, 9, 153–156.