**LITERATURE REVIEW**

**JOURNAL ARTICLES**

**Twice-Exceptional – General:**

Baum, S., Olenchak, F. R., Owen, S. V. (2004). “Gifted Children With Attention

Deficits: Fact and/or Fiction? Or, Can We See the Forest for the Trees?” Twice Exceptional and Special Populations of Gifted Students. Thousand Oaks, CA: Corwin Press. Pp. 35-65.

* “Rather than jumping to conclusions, educators and parents are encouraged to follow a step-by-step course of action that serves to rule out alternate hypotheses prior to referral for ADHD behaviors. Environmental modalities and strategies must be considered and assessed for behavioral effects by conducting comprehensive observations of classroom activities, curricular and pacing adaptations, and school efforts to reinforce creativity as well as to develop individual talent.” (p. 37)
* “Medications [prescribed for ADHD] are usually successful in controlling behavior, but they are also suspected to inhibit creativity and intellectual curiosity in bright children.”
* “School administrators occasionally exacerbate the situation by viewing ADHD purely as a medical problem, thereby absolving themselves, teachers, and school curricula from responsibility. Parents, too, can excuse their child’s inappropriate behaviors rather than providing the support and structure some of these students need to practice academic and behavioral self-regulation.” (pp. 37-38) **Absolutely can happen, from a parent who has been there and refused to medicate, but provided structure, coping mechanisms, and alternative stimulation when classes were not challenging.**
* Three groups of students who demonstrate behaviors associated with ADHD:
  + Students whose learning and attention problems stem, for the most part, from a neurochemical disorder
  + Those whose behaviors are mostly brought about, and perhaps intensified, by the learning environment
  + Those who fall into both of the preceding categories (p. 39)
* Children with ADHD, according to the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders*, …” have problems sustaining situation-appropriate attention. … A majority of these students have learning deficits in spelling, math, reading, and handwriting.”
* There is currently a consensus about a genetic and physiological predisposition to the disorder (ADHD).
* Emotional Development of Gifted Students
  + Dabrowski’s “increased psychic excitabilities” among gifted individuals (p. 41)
  + Piechowski and Colangelo’s “organic excess of energy or excitability of the neuromuscular system [that] manifests itself as a love of movement for its own sake, rapid speech, pursuit of intense physical activities, impulsiveness, restlessness, pressure for action, drivedness, the capacity for being active and energetic.” (p. 42)
  + Cruickshank “came to assess hyperactivity and extreme sensitivity to the environment as positive characteristics in bright children rather than as problematic behavior. … Their curiosity and desire for knowledge can take precedence over the school’s need for a prescribed curriculum locked in time, sequence, and space. In this sense, the regular classroom can be too restrictive for students predisposed to ‘overexcitabilities’.”
  + There is evidence that some adults may be intimidated or overwhelmed by the precocity of gifted youngsters and, as a result, may fail to exercise control over the child’s behavior.” (p. 44)
* Inappropriate Curriculum and Pacing
  + “Problems with hyperactivity, attention, and impulsivity increase when the curriculum is perceived as routine and dull.” **Of course.**
  + “When as much as 60% of the curriculum was eliminated, gifted students exceeded or equaled achievement levels of matched students who were required to complete the regular curriculum.” (p. 43)
  + “When school tasks are mysteriously frustrating or not meaningful and the environment is unfriendly, the student may avoid the aversion by searching for solace through optimal arousal elsewhere” – daydreams, visits to the school nurse, disrupting the boring class routine in any way.
* Application of Multiple Intelligence Theory
  + “Gardner’s Theory of Multiple Intelligences offers yet another hypothesis for understanding the complexity of attention disorders.”
  + “School is mostly about verbal and logical-mathematical abilities … other ways of knowing and communicating are not only restricted but often devalued.”
  + “Many gifted youngsters who are not achieving in school have exceptional spatial abilities.”
  + “When some hyperactive students are encouraged to learn and communicate in an area of strength (usually a non-verbal intelligence), even boring tasks are accomplished without accompanying behavioral problems.”
  + “Perhaps attention deficits are connected to specific intelligences, an idea that has not yet been investigated.” (p. 44)
* Barkley’s Trait Theory of ADHD as it applies to giftedness: “Everyone falls somewhere along a continuum of extreme inhibition to no inhibition.”
* Gifted and creative people fall on the low inhibition side of the continuum. “When the environment is too restrictive and inhibits the natural energy of such students, they find themselves being pushed toward a more extreme end of the continuum. At that point, the behavior of these students may resemble that of a smaller number of people who truly suffer from ADHD due to neurological or chemical imbalances.” (p. 45)
* “If changes in the classroom – including curricula and instruction – result in improved student attention and behavior, more intrusive and ineffectual interventions can be avoided.” (p. 46)
* Strategies to Assist in Evaluation:
  + Observe and document under which circumstances child has difficulty attending to tasks or performing acceptably.
  + Are there adaptations of curricular presentations (visual or kinesthetic, for example) that might capture the student’s attention?
  + Observe student’s behavior in different learning environments to estimate optimal conditions for learning.
  + Observe parent-child and teacher-child dynamics: limits set? Strategies for self-regulation provided? Student able to self-regulate?
  + Observe child at different times of day to discover whether student creativity is appreciated, reinforced, or allowed expression.
  + Investigate whether there is any effort to develop student’s gifts or talents; if so, how does student behave during these activities?
  + Pretest student to assess instructional levels and evaluate appropriate curricular pacing.
* “Unfortunately, current remedies for the vast majority of bright students with ADD-like behaviors typically encompass plans for medication and behavior modification, with little attention extended to curricula and instruction.” (p. 47)
* Students with a strong kinesthetic intelligence often work better when listening to music.

Grimm, J. (1998). The Participation of Gifted Students with Disabilities in Gifted

Programs, *Roeper Review*, 20(4), pp. 285-286.

* According to P.L. 94-142, [gifted students with disabilities] are legally entitled to an appropriate education in the least restrictive environment, which includes services for gifts as well as disabilities.” (p. 285)
* In a 1989 special education study in Texas, approximately 91% of the responding school districts had not identified any gifted learning-disabled students. A corresponding gifted program survey also reported that no gifted learning-disabled students were identified for the gifted program in 77% of the responding districts. 21 different definitions of “gifted” were reported.
* Grimm conducted a similar study in Minnesota in 1994, and found that 77% of the responding coordinators of special education programs reported that gifted students with disabilities were being served in the gifted program, and 81% of the corresponding GT coordinators indicated that gifted students with disabilities were being served in the gifted program.
* Two events heightened awareness in Minnesota:
  + 1988 *Minnesota standards for services to gifted and talented* was published by the Minnesota Department of Education
  + 1991 guide from Minnesota Department of Education Gifted and Talented Department included a table with specific identification procedures for identifying gifted students with disabilities (Rogers, 1991).
* 1993 study by Coleman and Gallagher of state identification policies found that 43 states’ policies “encouraged the schools to provide service to students in special populations, including those with disabilities who did not meet the initial acceptance requirements.”
* Special education and gifted education teachers must work together in the best interests of each child.

Konza, D. (1998). Inclusion for Children with Dual Exceptionalities, Paper presented at

the Annual Convention of The Council for Exceptional Children in Minneapolis, MN April 15-19, 1998.

* Paper focused on three individuals who are at “great risk of non-identification because their gifts or potential strengths are accompanied by a disability of some kind.” (p. 1)
* Sarah – gifted student with cerebral palsy
  + 14-year-old girl with severe athetoid cerebral palsy from birth
  + Unable to walk, and almost completely non-verbal, highly dependent on others to attend to her physical needs
  + Independently mobile by using a chin switch on an electric wheelchair
  + Relatively independent in written communication through technology (headpointer with IBM compatible laptop, Easy Keys software, speech output word predictor)
  + Above average mathematically, although reading and written language are delayed and spelling is poor
  + General knowledge reflects above average ability
  + Full time Integration Aide, fully integrated in primary years in local school
  + Transition to secondary school was complex and involved massive communication and training for teachers, children, administration, staff, as well as provision of a range of highly specialized resources
  + Positive outcomes of her integration in public school:
    - Special Education teacher had developed more mainstream classroom skills
    - Regular teachers have overcome misconceptions about abilities of people with disabilities
    - Peers have increased perspective on people with disabilities
* Melanie – gifted student with ADHD
  + Reading before entering school, rapidly grasped math concepts, and exceptional memory led parents to think she had great ability
  + Entertaining mimic and could easily copy accents
  + Bored easily and had frequent tantrums even at ages 9 and 10
  + Highly intolerant of people who could not grasp concepts quickly
  + Highly oppositional behavior and would not change
  + Several management methods were tried to little avail
  + “Some loss of self-esteem and sense of personal worth as she realized that her behavior was affecting family and social relationships” (p. 5)
  + Secondary school – truancy and increasingly hostile responses to authority
  + Underachievement
  + Parents and teachers would not give up on her
  + Tried Gossen’s Restitution Model
    - Emphasis “is on becoming the person one wants to be” (p. 6)
    - “Assists people in making an internal evaluation of what they can do to repair their mistakes.”
    - “Responsibility of wrongdoer to come up with a solution that will make some amends for the wrong done.
    - Melanie tried it and it worked for her. She gained control of herself.
    - Her father put it this way, “There are always waves on the ocean of Melanie’s life, but we now have fewer storms at sea.”
* Adam – gifted student with autistic tendencies
  + Uneven developmental profile, including not forming normal close attachments to mother, other family members, or with ‘significant others.’
  + Highly dependent on routines, vigorously resisted change, and had a range of obsessive behaviors
  + Demonstrated early interest in numbers and written language, but oral language did not progress past babbling through toddler years
  + Assessed by psychologist at age 3 (using Stanford Binet) as having average to low average ability and autistic tendencies
  + Parents believed that he had some exceptional abilities that were not detected
  + Adept at computer games that would challenge an older child while he was in pre-school, but had no interaction socially and began speaking in a robotic ‘Nintendo-like’ voice **Interesting since he found a strength in computer games that his voice would mimic those games’ sounds. Was he merely communicating like his “friends” in the games?**
  + In kindergarten, responded better to visual instructions than to verbal ones
  + Was reading aloud to his mother before starting school, but took months to do so in school
  + “He avoids tasks that he finds difficult because he strives for perfection and that rarely happens on a first attempt!” (p. 10)
  + Asocial behavior makes acceleration problematic
  + Has difficulty accepting correction or redirection, responding by saying “No! No!” repeatedly and babbling to himself. **Reprimanding himself for having made a mistake?**
* Contributing factors to successful inclusion of these and other students
  + Broadly based identification procedures (pp. 11-12)
  + Acknowledgement of individual learning styles and needs (pp. 12-13)
  + Collaboration (p. 13)
  + Informed approach (pp. 13-14)
  + Appropriate curriculum (p. 14)
  + Parent advocacy (pp. 14-15)
  + Philosophy of acceptance (p. 15)

Moon, S. M. & Dillon, D. R. (1995). Multiple Exceptionalities: A Case Study, *Journal*

*for the Education of the Gifted*, 18(2), pp. 111-130.

* Case study of an 11-year-old boy who did not attend school because of asthma, severe food and chemical sensitivities, poor motor skills, difficulties with perception and orientation, hyperactivity, and learning disabilities. Child was verbally gifted and learning disabled in mathematics.
* “Three clusters of factors can cause underachievement: (a) environmental, (b) personal-neurological, and (c) personal-psychological. Gifted children with disabilities of any kind are at risk for personal-psychological problems. The risk for underachievement increases if disabled-gifted children experience environmental stressors such as inappropriate schooling or have personal-neurological problems.” (p. 112)
* This study used qualitative, single-case methodology.
* Child was mentored for 25 sessions over the course of a year in creative writing.
* One interesting tidbit in the case study that had nothing to do with the topic was regarding Alec’s end of day ritual: “He then tells me a bedtime story**.” Usually the parent is telling the bedtime story.** (p. 116)
* “Alec also showed the subtest scatter on the WISC-R that Silverman has found typical of learning-disabled, gifted children.” (p. 118)
* When asked questions, “it often took him several moments to construct his response, and he tended to subvocalize while he was doing so.” (p. 120)
* “Several of his best story ideas came from dreams.” (p. 122)
* **“**Homebound instruction seemed more effective in nurturing Alec’s giftedness than in remediating his weaknesses or nurturing his social and emotional growth.” (p. 123)
* “Other important benefits of home schooling for Alec seemed to be the development of creativity and an intrinsic motivation. Creativity is often an undeveloped strength in learning-disabled gifted children.” (p. 126) **This would indicate that we will want to specifically include modifications that foster creativity when we design curricula for this population.**
* “While most learning-disabled gifted children in school settings receive a great deal of remediation for their weaknesses and very little enrichment for their strengths, Alec’s situation was just the opposite. … As a result, his strengths became stronger and his weaknesses weaker.” **It would appear, then, that it is equally important to develop strengths and improve areas of weakness.**
* “The findings of this study suggest that children with multiexceptionalities should be assessed especially carefully, using as many methods as possible. It may be dangerous to rely solely on test scores in assessing their talents.”
* “Whenever possible, home teaching programs for children like Alex need to be balanced with activities with peers and experiences with group instruction.” (p. 127)
* Suggestions for duplicating Alec’s learning environment in a school setting:
  + Individually tailored mentorships
  + Create unstructured spaces within the structure of a normal school day where students can pursue their own interests
  + Provide opportunities for the development of creativity
* Look at the Albuquerque Public School System as a model – “Twice-Exceptional Children project” (pp. 127-128)

Morrison, W. F. & Rizza, M. G. (2007). Creating a Toolkit for Identifying Twice-

Exceptional Students, *Journal for the Education of the Gifted*. 31(1), pp. 57-76.

* Article purports to design a plan for identifying twice-exceptional students.
* Reports on “Project O2E, a state-funded collaboration program that resulted in a toolkit for identifying students who are twice-exceptional.
* “Underrepresentation of students with disabilities in gifted programs continues to be the main issue.” (p. 57)
* Most states do have language “regarding identification and encouraged educational provisions for twice-exceptional students.”
* “Mills and Brody (1999) pointed to the following three characteristics as indicators of the twice-exceptional student: (a) evidence of an outstanding talent or ability, (b) evidence of a discrepancy between expected and actual achievement, and (c) evidence of a processing deficit.” (p. 58)
* “The twice-exceptional student rarely gets to the point of failing and is able to mask discrepancies in achievement.” (p. 59)
* “Although the use of intelligence tests can provide the practitioner with valuable information, its value needs to be viewed as limited for the twice-exceptional student.” (p. 60)
* “McCoach, et al. (2004) warned that use of test scores alone will cause many students to go unnoticed because abilities may be masked by disabilities, and there is the possibility of a regression to the mean effect on overall test scores commonly used to identify gifted students.”
* “For the twice-exceptional student, the process must include an examination of strengths and weaknesses, drawing upon what the student knows to assist him or her with problems.” (p. 61)
* “Among the components needed in the referral and placement process for the [2X student] are: individually administered intelligence tests; information from multiple sources including parents, family, and the student; observations of the student; case histories; and subjective evaluations.”
* “Because training and support will only go so far in finding the twice-exceptional, districts must be willing to extend services to these students in the absence of full funding, because funding is currently tied to the number of appropriately identified students.” (p. 62)
* Assessments such as skill worksheets “may not accurately evaluate true potential in gifted students who are not motivated to complete work that they perceive as redundant.” (p. 63)
* Recommendations for designing identification plan for 2E students:
  + In-service training for general, special, and gifted education teachers on the characteristics and needs of [2E];
  + Inclusion of gifted education teachers on Individual Assistance Teams (IAT) and Multifactor Evaluation (MFE) teams and special education teachers involved in the gifted identification process;
  + Formation of a multidisciplinary team responsible for referrals and further evaluation of {2E} populations;
  + Flexibility in use of test data to include subtest scores to denote discrepancies between ability and achievement; and
  + Use of traditional and nontraditional data that further demonstrates student strength areas including tests from approved list for gifted identification, teacher, parent, and student nominations, student product assessment, behavior checklists, record review, portfolio assessment, and progress monitoring. (pp. 63-64)
* Project O2E is described in terms of data collection in three school districts in Midwest state: one urban, one suburban, and one rural. (p. 64- 65)
* Interviews and focus group discussions “comprised the primary data collected for this project.”
* “Data … were analyzed using qualitative methods. (p. 66)
* “The results of the analyses are called a toolkit, designed to provide districts with a wide variety of options from which to choose when defining an identification plan for the twice-exceptional. … the actual contents of the toolkit should be modified to meet the policy and procedures specific to individual districts and needs of the student populations therein.” (p. 67)
* “Each toolkit shall include description and items in the following categories:
  + I. Referral and Screening,
  + II. Preliminary Intervention,
  + III. Evaluation Procedures, and
  + IV. Educational Planning
* Three categories to which 2E students belong:
  + Students first identified as gifted who later show indicators of a specific disability area;
  + Students identified as having a specific learning disability and who also show outstanding talent in one or more areas; or
  + Students who may appear average or underachieving because the disability area masks any manifestation of giftedness.
* “A team of school personnel [should] be established [to provide] analysis of student progress.” (p. 69)
* Portfolios of student work should be assembled for evaluation of students’ needs. Student interests and hobbies will be looked at well as more traditional factors. (p. 70)
* 504 plans or newly designed forms that mirror the IEP will be adapted to include curriculum modifications for enrichment and remediation for 2E students. (p. 71)
* “Communication and collaboration between special and gifted personnel remains a stumbling block.” (p. 72)
* Training sessions and in-service topics should include how to meet the needs of 2E students.
* “Maintaining a wide range of options available for identification appears to be the soundest plan for accurately measuring strengths and weaknesses [of 2E students].
* “It was found in this project that identification in special areas like science and social studies before grade 4 was not stable.”

Zirkel, P. A. (2004). The Case Law on Gifted Education: A New Look, *Gifted Child*

*Quarterly*, 48(4), pp. 309 – 314.

* “This article provides a comprehensive, concise, and current overview of the case law – specifically, published hearing/review officer and court decisions – concerning gifted education for K-12 students. This case law represents two distinct groups: ‘gifted alone’ … and ‘gifted plus.’” (p. 309)
* People working with gifted and twice-exceptional students need a clearer understanding of the case law. “The statutory or regulatory framework is primarily on the state level for the gifted-alone category. It is primarily on the federal level for the gifted-plus category.”
* “Thorough searching resulted in a final sample of approximately 75 hearing/review officer and 60 court decisions from 1962 to 2002.” (p. 310) These can be found in *The Law on Gifted Education*, National Research Center on the Gifted and Talented, University of Connecticut, 2003.
* “‘Gifted plus’ refers to two groups of students “who are, or at least purport to be, additionally or alternatively legally eligible under other federal special legal protection. … (i) ‘twice exceptional,’ referring to those whose other legal protection stems from one or more of the laws applying to students with a disability, and (ii) ‘gifted minority,’ referring to those whose other legal protection is based on race or national origin.”
* “The federal Constitution does not provide a right to an education, much less a right to a gifted education.”
* “Federal legislation does not provide an entitlement to gifted education.”
* “State constitutions, although varying in the specificity and strength of their education provisions, are generally not a fruitful basis for judicial claims on behalf of gifted students.” (pp. 310-311)
* “State common law, or court decisions arising without pertinent provisions in a constitution or other such codification, is not a viable basis for establishing a right to specialized education for gifted students.” (p. 311)
* A few states have strong gifted education legislation or regulations (PA, for example) but it usually falls on the side of the school district rather than the parent.
* “Even where the child’s dual exceptionality is recognized, the hearing/review officers and courts have tended to focus on the child’s disability, not giving significant weight to giftedness in terms of interpreting and applying the FAPE requirements, including least restrictive environment.” (p. 312) **Does this explain why GT specialists are seeking more diagnoses? With a diagnosis comes protection under the law and funding, whereas that protection and funding is not available for the “simply gifted.”**
* “Sec. 504 and the ADA apply if the gifted child is eligible in terms of these sister statutes’ broader definition of ‘disability,’ which consists of three elements: (a) a mental or physical impairment (b) substantially limiting (c) a major life activity.”
* “Based on the IDEA, a hearing officer in New York ruled that a gifted child with disabilities was entitled to a gifted education component in his IEP even though the IDEA does not extend to gifted education and New York law does not provide a mandatory entitlement to gifted education.”
* “A minority-group child who is or may be gifted is covered by the protection of civil rights laws, which prohibit discrimination based on race or national origin.” (p. 313)

**ADD/ADHD:**

Chae, P. K., Kim, J.-H., & Noh, K.-S. (2003). Diagnosis of ADHD Among Gifted

Children in Relation to KEDI-WISC and T.O.V.A. Performance, *Gifted Child Quarterly*, 47(3), pp. 192-201.

* Study was conducted “to evaluate the correlation between intelligence and a Continuous Performance Test (CPT) that assesses ADHD in children.” (p. 192)
* 177 elementary school children were studied—106 gifted from the Educational Institute for Gifted Children and 71 nongifted from elementary schools in Seoul.
* 73 boys and 33 girls / average age 7.7 years with a range of 6 – 9 years, average IQ 138.4 with a range of 130 – 157 for gifted group and 83 – 127 for nongifted group. (p. 194)
* About 9.4% of the gifted children were identified with ADHD using the Test of Variables of Attention (T.O.V.A.), Child Behavior Check List (CBCL), and Teacher’s Report Form (TRF).
* “The prevalence of ADHD in children among the clinical population is approximately 40%.”
* “Due to the alarming number of referrals for attention disorders among gifted children, there is concern that some nonintellectual features of gifted children (e.g., creativity) may be misinterpreted as symptoms of ADHD.”
* This study suggests that “higher norms on tests such as T.O.V.A. may be necessary for diagnosing ADHD in gifted children.” **That would just be raising the bar on the same standard, wouldn’t it?**
* “Thorough investigation about the nature of inattention, impulsivity, and hyperactivity is necessary for the diagnosis of ADHD among gifted children.”
* “Medication is usually successful in controlling behavior, but it is also suspected of inhibiting creativity and intellectual curiosity in bright children.” (p. 193)
* Discussion of overexcitability as opposed to ADHD in gifted children. “It is difficult to differentiate a gifted child’s overexcitability from ADHD symptoms.”
* “There is perhaps a very large overlap between what we call ADHD and creativity.”
* “Those with IQs over 130 are hardly ever diagnosed with ADD.”
* “Children with ADHD perform comparatively poorly on tests in general.”
* “Gifted children tend to demonstrate weakness in one or two subtests of the Freedom From Distractibility Factor of the KEDI-WISC (a Korean version of the WISC), such as the Arithmetic and Digit Span subtests.” (p. 194)
* T.O.V.A.’s visual mode was used for this study – small black squares appearing on a computer screen. **Isn’t this sort of like a video game? Don’t children with and without ADHD focus on video games equally well?**
* The CBCL and TRF are observational instruments recorded on scales **with no references as to WHY the behaviors are occurring**.
* Data was analyzed in a number of ways and a discussion of this analysis is provided. (pp. 195-199)
* “Thorough investigation about the nature of inattention, impulsivity, and hyperactivity is necessary for the diagnosis of ADHD among gifted children.” (p. 200)
* “Gifted children with ADHD can likely benefit from social skills training to improve relationships with their peer group.”
* “Generalizing these findings to other situations and cultures requires caution because the subjects were not recruited from general schools but from an institute for gifted children. They may have received some special education or training from the institute, which may have influenced the results.”

Leroux, J. A. & Levitt-Perlman, M. (2000). The Gifted Child with Attention Deficit

Disorder: An Identification and Intervention Challenge, *Roeper Review*, 22(3), pp. 171-176)

* Study “reviews the literature on ADHD traits, their similarity to gifted and creative behaviors, and the implications for educational interventions. A case study of a [third grade] boy identified with ADHD provides the focus” for the discussion. (p. 171)
* Child in study has always been at least two years ahead of his peers academically, but is immature. His teachers have not considered the possibility that he might be gifted.
* “The diagnosis of DHD does not include any intellectual boundaries and the characteristics of it are remarkably similar to those of creativity.” (p. 172)
* Characteristics associated with both ADHD and giftedness:
  + Hyperactivity
  + Challenge of Authority
  + Disruptive Behavior
  + Social/Emotional Development in asynchrony with intellectual development
* “Multiple diagnostic measures which would reveal gifts, attentional problems, learning disabilities, and emotional problems, are necessary.” (p. 173)
* “Results from the WISC III-R may not be accurate in many children with ADHD whose lack of attention to the tasks may affect scores. Their high levels of creativity may go undetected. The WISC III-R Freedom From Distractibility Factor is not always considered a reliable indicator of ADHD. When school boards require identification before beginning enrichment programs, gifted/ADHD students fall through the assessment cracks.”
* Sad story: “Though Jason displayed many of the characteristics of ADHD, his kindergarten teacher told his concerned parents that it was not possible because Jason was too smart. As he continued through grades 1 and 2, teachers focused on behavioral problems rather than his advanced academic achievement. In fact, on his grade 1 report card, his teacher failed to mention that he was reading at grade 4 level. They never suggested testing for ADHD because they could see that he was able to focus when he so chose. Now, grade 3, Jason has lost interest in school due to the frustration of unchallenging activities and peer rejection. His self-esteem is low and he is performing at grade level, though group achievement tests have p[laced him significantly above average. Now Jason’s teachers see no reason to consider giftedness or ADHD; they just look at him as a difficult child with an attitude problem.”
* “Olenchak reported that a highly structured individualized school wide enrichment program (based on Renzulli’s model) was found to have a positive impact on the attitudes, self-concepts, and relative productivity of gifted/LD students. … It would be especially beneficial for gifted/ADHD students, giving them the opportunity to focus their energy on challenging and meaningful tasks.” (p. 174)
* “Pirie (1995) pays special attention to the process of learning. By teaching English through kinesthetics, he uses the area in which students are skilled to approach another subject. A musical child, for example, might react more positively to the prospect of writing a song about the environment than to the idea of writing an essay on the topic.”
* Extrinsic motivation can be beneficial with gifted/ADHD children. For example, “If you get your work done now, we will have time to go get your skates sharpened.”
* A wonderful chart listing behavioral, curriculum, and instructional strategies for the gifted, ADHD, and gifted/ADHD child is provided. (p. 175)

Lovecky, D. V. (1999). Gifted Children With AD/HD, Paper presented in slightly

different form at the Annual CHADD International Conference.

* Four major conclusions:
  + Gifted children with AD/HD differ from average children with AD/HD in cognitive, social, and emotional variables.
    - They miss many easier items and are correct on much more difficult items on tests of intelligence and achievement
    - Abstract reasoning ability is often well developed and in advance of other more basic skill levels.
    - Exhibit more mature use of metacognitive strategies but often forget to use them, accounting for variability of work product.
    - Can become overwhelmed with worries.
    - Empathetic and compassionate for others
    - Advanced need for complexity in friendships, but often misread social cues and show lack of understanding of group goals.
  + Gifted children with AD/HD differ from other gifted children.
    - Show a greater degree of asynchrony among cognitive, social and emotional areas of development, and much greater variation in ability to act maturely.
    - Cognitive deficits are shown in less ability to think sequentially, to use working memory adequately.
    - Complete less work, tend to hurry through it, often change topics on projects, take inordinately long to complete simple exercises.
    - Find it difficult to work in groups, even groups of gifted children.
    - Intrinsic reward of completion is not as satisfying.
    - When working on self-chosen activity, is able to work for long hours without much external reinforcement – even with AD/HD.
    - Show more difficulty with self-control and self-monitoring behavior.
  + Assessment of gifted children needs to be done by those knowledgeable about both giftedness and AD/HD.
    - Gifted children with mild AD/HD who are placed in a stimulating school environment with small classes will see significantly decreased symptoms of AD/HD.
    - G-AD/HD children should be compared to gifted peers in a stimulating environment rather than to average children in regular classes.
    - A profile of strengths and weaknesses needs to be collected from home, school, and other activities. These should then be compared to the child’s own mean, rather than to absolute age norms. “Deficit areas of gifted children with AD/HD can be overlooked if only age norms are used as a measure of ability or achievement.”
    - “Intelligence should not just be based on the Wechsler scores. Use of the Stanford-Binet LM as a supplementary test should be considered when two or more verbal subtests of the Wechsler are in the SS 17+ range,” indicating too low a ceiling.
  + Recommendations about Individual Education Program (IEP) or Section 504 planning need to consider both AD/HD problems and the effects of being gifted.
    - “Gifted children with AD/HD may need acceleration at the same time that they need to learn metacognitive skills that will support the higher level of functioning required.”
    - “They will need a differentiated program, not just placement in an advanced class.”
    - “They may need to be specifically taught study and organizational skills, in the context of higher level work, that gifted peers acquire without difficulty.”
    - They need access to mentors to work in areas of strength.

Moon, S. M. (2001). “Gifted Children With Attention-Deficit/Hyperactivity Disorder” in

the social and emotional development of gifted children: what do we know? Washington, D.C.: Prufrock Press, pp. 193-201.

* “Little empirical research has examined the unique issues that arise when AD/HD and giftedness co-occur.” (p. 193)
* “In the current edition of the *American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders*, four subtypes of AD/HD are recognized: Predominantly Hyperactive/Impulsive, Predominantly Inattentive, Combined, and Not Otherwise Specified.” (p. 194)
* “Cognitive tests of pre-frontal functioning [in children with AD/HD] show developmental delays of two to three years.”
* “These students have deficiencies in executive functioning that influence their behavior at home and at school.” **I thought that executive functioning wasn’t consistent with intelligence until a child matures – up to mid-20s, if ever.**
* If a gifted child is misidentified as having AD/HD, it would have “negative consequences for the social and emotional development of a gifted child because his or her real needs would not be met and because he or she might receive inappropriate treatment, such as unnecessary psychotropic medication.” (p. 195)
* “Giftedness can mask an attention-deficit disorder for a time. … The higher the IQ, the later the AD/HD diagnosis tends to occur.”
* “Hidden AD/HD has negative effects on the self-concept of the gifted child because trying harder has little effect on such AD/HD as disorganization, daydreaming, incessant talking, inability to sit still, and social immaturity.”
* “Children with AD/HD typically score 1-10 points lower on IQ tests than normal children at the same ability level.” (p. 196)
* “Children with AD/HD have more difficulty than normal children sustaining attention to low-interest, low-stimulation activities with distal reinforcers.” **This seems more like an attribute of a gifted child who wants to move on to something interesting and active.**
* “Children with AD/HD can sustain attention *better* than normal children when interest is high, tasks are challenging, and reinforcement is rapid.” **Again, this sounds like a gifted child who is fascinated with things that interest him, enjoys being challenged, and sees immediate reinforcement.**
* “Gifted children with AD/HD have difficulty regulating their emotions.” (p. 197) **How is this different from Dabrowski’s overexcitabilities of gifted children?**
* “Children with AD/HD … exhibit annoying and sometimes aggressive behaviors that are disliked by their peers and can lead to social rejection.” **Gifted children pass through parallel play into interactive play at an earlier age and sometimes exhibit aggression in response to their frustration that other children to not understand their “rules.” This can lead to social rejection that has nothing to do with AD/HD.**
* “Gifted children with AD/HD have difficulties sustaining attention to routine tasks, shifting attention, transitioning between tasks, monitoring their progress on long-term projects, keeping track of homework, organizing their desks and lockers, and following directions.” (p. 198) **Gifted children do not like routine tasks, get involved in what they are doing and do not want to move on until they are finished, get sidetracked by interesting branches when working on long-term projects, and often don’t consider homework of something they already know or organization of their desks to be important.**
* The gifted child with AD/HD has a preference for “high-stimulation learning contexts. They like hands-on activities, computer-based instructions, high-interest content, and one-on-one attention from an adult.” (p. 199) **How is this description different from that of a gifted child without AD/HD?**

Moon, S. M., Zentall, S. S., Grskovic, J. A., Hall, A., & Stormont, M. (2001). Emotional

and Social Characteristics of Boys With AD/HD and Giftedness: A Comparative Case Study, *Journal for the Education of the Gifted*, 24(3), pp. 207-247.

* Participants were 3 boys with AD/HD and giftedness and 6 comparison boys with only one of the two exceptionalities – 3 with AD/HD and 3 GT alone. Data was collected from the boys, their parents, and their teachers. (p. 207)
* “Participants with co-occurring giftedness and Ad/HD had difficulties regulating their emotions, problems with peer relationships, and stressed families. Giftedness appeared to exacerbate the social/emotional difficulties associated with AD/HD rather than serve a protective function. The findings suggested that AD/HD is a risk factor for psychosocial adjustment difficulties in young boys who are intellectually gifted.”
* “In general, intellectually gifted children have been found to be as well or better adjusted emotionally than children of average intelligence during the elementary school years. … The social/emotional problems that do exist among gifted children are often exogenous in origin, [such as] inappropriate, unchallenging educational contexts.” (p. 209)
* “The studies that have been conducted suggest that G/LD students experience internal dissynchrony and high levels of frustration. Such students also have been reported to have problems with their relationships with teachers and peers. At the same time, there is some evidence that parents perceive GLD children positively, finding them easy going and cooperative with adults.” (p. 210)
* “Little attention has actually been paid to the characteristics and needs of gifted children ho actually have coexisting AD/HD.” (p. 211)
* The first two authors of this study had different theoretical perspectives: Moon specializes in research on GT and Zentall specializes in research on children with AD/HD. “These differing areas of specialization provided theoretical triangulation in the design and analysis stages of our research.” (p. 212)
* Participants in study were all enrolled in Midwest school district that “(a) utilized an identification procedure that encouraged the inclusion of students with AD/HD in gifted programming; (b) provided self-contained classes in gifted education with differentiated curricula taught by teachers with certification in gifted education; and (c) served as a statewide model of excellence in programming for gifted students.” (p. 212) In other words, students should be placed in appropriate educational environments.
* Data Collection:
  + Interviews with children, parents, and teachers
  + Rating Scales
    - Conners Rating Scale-Revised, Home Situations Questionnaire-Revised, and Family Environment Scale were given to parents
    - Teacher form of the Conners Rating Scale-Revised was given to teachers
* Analysis of Data:
  + Descriptive quantitative analyses
  + Case Analyses
  + Within-Group Analyses
  + Cross-Group Analyses
* Findings reported in 3 categories: emotional characteristics, peer relationships, and family process.
* Emotional Characteristics:
  + G/ADHD – least mature with poorest emotional adjustment of 3 groups
  + ADHD – fair to good maturity and emotional adjustment
  + G only – rarely over-responded emotionally to situations and were judged to have good to excellent emotional adjustment (pp. 221-224)
* Peer Relationships:
  + G/ADHD – immature, annoying, and irresponsible behavior, contributed to social rejection in self-contained classrooms for gifted students. Described as “friendless loners in school who were tolerated by their gifted peers, but seldom picked as work or play partners.” (p. 225) They did have some friends in out of school contexts, enjoy imaginative play, creating things. (p. 227)
  + ADHD – exhibited many behaviors associated with disorder but with “only minor impact on their social functioning at school. Although described as hyperactive and annoying, outcasts, silly and immature, an oppositional and aggressive, none of the boys in this group appeared to be rejected by their peers at school.” They did participate in organized team sports, which may have contributed to their successful social functioning, since sports participation receives high status among young boys. These boys had friends in their neighborhoods and in school who shared their active play styles and occasionally got into trouble. (pp. 228-229)
  + G only – “difficult to characterize the overall social functioning of the three boys in the pure GT group as a group because they were heterogeneous in this area.” (p. 229)
    - G-1 was most mature and socially skilled, popular in classroom and in neighborhood, participated in sports as a hobby, a leader, cooperative in class, well-adjusted, empathetic.
    - G-2 was tougher, pushy with thoughts and ideas, did have group of friends who “shared his interests in science, space, fantasy, and dramatic play.” (p. 230)
    - G-3 liked sports but was not participating in them, having difficulties with peer relationships, had a single good friend, but teacher attributed his difficulties socially as being “too advanced for the other kids when it comes to just being able to relate and play.”
* Family Process:
  + G/ADHD – unstructured and disorganized family processes, difficulty establishing consistent routines, moderate to high levels of conflict between parents and child (except for G-1 whose family style emphasized autonomy and differentiation over closeness and cohesion but did not fight or yell). Families in this group did not do very many things together as a family unit, compared to the other two groups. (pp. 230-233)
  + ADHD – less conflicted and hectic than the families of GH-1 and GH-2, “actively working at developing closeness in their families and created many opportunities for family outings and active, shared activities.” These families valued traditional family sit-down meals, had clear rules, children had chores, routines were reinforced. (pp. 234-235)
  + G only – strong interpersonal relationships, well-organized family life, and many shared activities. (p. 235)
* Threats to the validity of the study:
  + Small number of participants
  + Reliance on self, parent, and teacher reports rather than researcher observations
  + Missing data.” (p. 236)
  + “Intellectually gifted boys with AD/HD placed in heterogeneous classrooms might exhibit different social/emotional characteristics from those placed in special classes for gifted students.” (p. 236)
  + “All the participants were white males between the ages of 8 and 10.”
* “The families undergoing a current relationship transition were more stressed than both stable single-parent and stable biological-parent families. … Family transitions should be taken into account in future investigations of the characteristics of families of children with giftedness, AD/HD, or both. (p. 238)

Zentall, S. S., Moon, S. M., Hall, A. M., & Grskovic, J. A. (2001). Learning and

Motivational Characteristics of Boys With Ad/HD and/or Giftedness, *Exceptional Children*, 67(4), pp. 499-519.

* “This study compared the academic and learning characteristics of [9] students with (a) Attention Deficit/Hyperactivity Disorder (AD/HD), (b) giftedness, and (c) giftedness with AD/HD [in a Midwestern school district].” (p. 499)
* G = Gifted only ; GH = Gifted and ADHD; H = ADHD only
* Limitations of study: small number of participants, missing data, no additional GH comparison group in the general educational context. (p. 512)
* Three different reporting sources were utilized – teachers, parents, and the children in the study. (p. 500)
* “The mean age of the nine participating boys … was 9 years, 2 months (range 8 years 4 months to 10 years 6 months).” (p. 501)
* Study used a multiple-case design. (p. 502)
* Parents and teachers filled out ratings scales (p. 503)
* Multiple levels of analysis: case analysis (1-2 hour peer debriefings every 2 weeks for 3 years); within-group, cross-case analyses; cross-group analysis
* “All three groups of students (G, GH, H) at this age had difficulties completing tasks requiring lower level skills, which may be characteristic of young boys in general.” (p. 505)
* Disorganization was reported by multiple sources in the H and GH groups.
* “Students with GH demonstrated creativity through humor, creating games, assembling ideas or things in novel ways, and imaginative expressions.” (p. 506)
* “Problems with Specials (art, gym, music) were reported only for the pure H group.”
* More gifted children than would be expected by chance, who also met the rating criteria for AD/HD, were placed in a highly creative subgroup within a gifted school program.” (pp. 508-509)
* “In contrast to the reported talents and preferences, there was evidence that high intelligence made some of the problems of students with AD/HD more apparent.”
* “GH students were aware of heir teachers’ displeasure and were able to articulate the discrepancy between expectations and performance.”
* “Overall, thee was consensus for all the students in that science was the most preferred, especially when there were experiments or projects.”
* “The most helpful motivational strategies reported for all three subgroups of students at this age were teachers who gave students individual attention and took personal interest in them.” (p. 510)
* The G group preferred to work alone, but the GH and H groups preferred group learning and opportunities for discussion.
* Awareness is necessary of the importance of monitoring comprehension rather than the appearance of attention. (p. 511)
* The strategy of taking away activities when the child does not do work often makes the situation worse, especially for the GH students. “Withholding activity further reduces stimulation making it harder, not easier, for the child to complete non-meaningful and non-challenging tasks.” (p. 512)
* “Both groups with AD/HD (H and GH) were generally described as underachievers.” (p. 513)
* A dislike for homework was directly attributable to AD/HD in both gifted and not gifted groups.
* “The emotional maturity of students with GH does no appear to be at the same level as their intellectual and imaginational talents, which may contribute to social/emotional adjustment difficulties.” (p. 516)

**Autism Spectrum Disorders:**

Cash, A. B. (1998). A Profile of Gifted Individuals With Autism: The Twice-

Exceptional Learner, *Roeper Review*, 22(1), pp. 22-27.

* “According to a Fact Sheet generated by the U.S. Office of Gifted and Talented, it has been estimated that up to 300,000 children in the United States are both gifted and learning disabled.” (p. 22)
* Cash suggests that the behaviors associated with autism are merely traits normally perceived as beneficial taken to a higher degree. Robin Clark explains, “The genetic traits that can cause severe disabilities can also provide the giftedness and genius that has produced some of the world’s greatest art and scientific discoveries.”
* Standard classifications of autism:
  + Asperger Syndrome – normal or near normal development until 18 months, followed by regression. “Poor motor coordination, late mobility, formal speech with pseudo-adult qualities expressed in a monotone voice, strong attachment to places, depression, echolalic speech, routinized obsessive-compulsive behaviors, difficulty in relating to people, poor eye contact, a lack of empathy for others, and poor intuition. They may also engage in untraditional and unorthodox cognitions which can result in creative products.” (p. 23)
  + Kanner-type – “characterized by early illness (usually before the first year), a lack of eye contact, late speech, a paucity of interaction with people, stereotyped body movements (repetitive behaviors), a lack of proper pronoun usage, hyperplexic reading, and possible mental retardation.
  + Pervasive Developmental Disorder Not Otherwise Specified (PDDNOS) – “diagnosed when the condition appears atypical, inconsistent, and less severe. … It is associated with aberrant language development, early onset, difficulties with social relationships, and stereotyped and peculiar motor behaviors.”
  + Regressive/Epileptic type – “characterized by the absence of receptive speech (the inability to understand others), modality mixing, coordination difficulties, epileptic seizures, abnormal EEG readings, an undersized brain stem, mental retardation, and high anxiety levels.”
* “It is often difficult if not impossible to distinguish autism from true genius at an early age.”
* Focusing – “their minds take off on journeys that are beyond their control.”
* Negative Behaviors – “lists of negative attributes describing gifted students can run parallel to those characterizing autistic learners; they sometimes differ only in their intensity.”
* Visual Thinking – Most autistic individuals think in acute visual images.
* Friendships – gifted individuals with autism “lack social skills and connectedness, along with their rigidity and affinity to monopolize situations, [leading to] social separateness.”
* Hyper-Vigilant Senses – Dabrowski’s theory of overexcitabilities of the gifted applies equally to gifted/autistic individuals. (p. 24)
* Family Loading – “studies investigating the families of both autistic and gifted individuals indicate that the history often includes relatives displaying great genius.” Rimland concluded in 1978, “Many seem to have inherited the neurological make-up that permits them to zero in on whatever attracted their attention. But these children lack the capacity to ‘zero out,’ to expand their focus and comprehend the context of whatever they are focusing on.”
* Several biographical sketches of twice-exceptional (gifted/autistic) learners were offered.
* Eminent individuals with autistic tendencies:
  + Albert Einstein
  + Bobby Fischer
  + Bill Gates
  + Howard Hughes
  + Sir Isaac Newton
  + Vincent Van Gogh
  + Ludwig Wittgenstein
  + Mozart
  + Bartok (p. 25)
* Positive impacts of being labeled autistic/gifted
  + Broader spectrum of competencies than autistic individuals whose mental abilities are weak
  + Gifts to self and society are more effectively shared and accepted by others
  + Parental involvement is key
  + More easily “tolerated” by society as they learn behavior modification and metacognitive strategies (p. 26)
  + Giftedness allows them to manipulate autistic tendencies
* Negative impacts of being labeled autistic/gifted
  + Forced to live in two worlds
  + Inconsistent combination of strengths and weaknesses confuses uninformed teachers and peers.
  + Treated with cruelty by other children
  + Social rejection
  + Strengths and weaknesses often mask each other
  + Schools teach to their weaknesses rather than their strengths
* Possible educational interventions for gifted individuals with autism:
  + Early identification and screening
  + Use of eclectic diagnostic instruments
  + Parent support networks
  + Coordinated teacher and parent training
  + Structured behavior modification programs
  + Channeling through islets of ability
  + State of the art medical equipment and drugs
  + Learning theory reforms

Henderson, L. M. (2001). Asperger’s Syndrome in Gifted Individuals, *Gifted Child*

*Today*, 24(3), pp. 28-35.

* DSM-IV Definition is provided for Diagnostic Criteria I, II, and III (p. 29)
* “Hans Asperger, an Austriam psychologist, first published his description of a developmental syndrome in Europe in 1944.”
* English-speaking psychologists did not recognize the syndrome until after Wing’e paper on Asperger in 1981.
* “AS occurs 2-7 times more often in males as in females.” (p. 30)
* “It seems as though the prevalence of AS in thee gifted population may have contributed to the mythological stereotype of the socially impaired gifted child.”
* “Ehler’s research group (1997) found children with AS to exhibit strengths in verbal IQ, with arithmetic subtest scores lower than those on other verbal subtests.”
* Several diagnostic scales are described and weighed against each other. (pp. 30-31)
* Characteristics common to people with AS:
  + Inefficient sensory system
  + Amorphous sense of time
  + Difficulty with social/emotional cues
  + Cognitive inflexibility
  + Attentional problems
  + Problems with perspective taking
  + High-level pragmatic communication deficits
  + Difficulty with sense making as a result of very literal thinking
  + Difficulty with perceiving and abiding by socially expected communication behaviors (pp. 31-32)
* “The focused nature of academia or research can be a good career fit for persons dedicated to compiling an exhaustive database on any particular subject.”
* Other good career fits: science or computer-related vocations, fact and detail-based jobs.
* “Even though they long for peer companionship, many children with AS are more comfortable talking with adults. … Then again, preference for adults is often noted in gifted individuals.” (p. 33)
* Teachers and adults working with students who are intellectually gifted and have AS must:
  + Be sincere
  + Respect individual differences
  + Use a neutral tone of voice, showing no irritation
  + Protect student from bullying by educating peers
  + Work as a team with parents
  + Seek information about AS and giftedness
  + Involve personnel who have expertise in meeting both the gifted and AS needs of the student

McMullen, P. (2000). The Gifted Side of Autism, *Focus on Autism and Other*

*Developmental Disabilities*, 15(4), pp. 239-242.

* Article is the author’s story of her life as an active autistic person (autism/pervasive developmental disorder)
* Symptoms she experienced:
  + Rocking
  + Squirmed when held
  + Tantrums
  + Expressing herself in “odd” ways
  + Clothes felt scratchy
  + Couldn’t stand cigarette smoke (before it was ok to say so)
  + Watched people’s lips when they talked
  + Bothered by others’ perfume
  + Understood students with LD—they made sense to her
  + Heightened sensory awareness
* Assets of Autism:
  + Acute senses
  + Some children with autism draw in 3-D perspectives at young age
  + Some young autistic children are expert at swiftly putting together puzzles
  + Most can visualize things as a whole easily
  + Attentive to detail
  + Some have savant math skills
  + Almost compulsively tell the truth
  + Generally good hearted and trusting
  + Somewhat more psychic
  + Possess perseveration (one-track mind)
  + Deeply spiritual

Neihart, M. (2000). Gifted Children With Asperger’s Syndrome, *Gifted Child Quarterly*,

44(4), pp. 222-230.

* Asperger’s “is characterized by serious impairment in social interaction skills and repetitive behaviors and is believed to be the result of a specific brain anomaly.” (p. 222)
* “It can be challenging to determine whether a child’s unusual development is a result of giftedness, a learning disability, or AS, especially among highly gifted children.”
* Although Hans Asperger, the Austrian physician who first identified the syndrome in 1944 believed that it was more likely to be observed in “children of high intelligence and special abilities,” clinical research on AS has “focused on average or low-average intelligence. There has been surprisingly little examination of AS among gifted children.” (pp. 222-223)
* AS is more common in boys than in girls.
* Identifying characteristics:
  + Little or no empathy
  + Monotonous speech patterns
  + Highly idiosyncratic and intense interests
  + Social isolation as a result of inappropriate social communication
  + Inflexible thoughts and habits
  + No evidence of delayed speech
  + Onset of difficulties is somewhat later than for other autism spectrum disorders
  + More commonly experience motor deficits
  + Eye contact is often odd. They may seem to gaze off or stare straight through those with whom they are conversing.
  + Express some interest in people as they get older
  + Speak before age 5
  + Can become well adapted as adults, and even successful
  + Some demonstrate unacceptable habits, such as eating odd things, inappropriate touching, gnashing their teeth, and aggressive actions
* Characteristics common to gifted children and to children with AS:
  + Verbal fluency or precocity
  + Excellent memory
  + Fascination with numbers or letters and enjoy memorizing factual information at an early age
  + Demonstrate absorbing interest in a specialized topic
  + Annoy peers with limitless talk about their interests
  + May ask endless questions or give such lengthy and elaborately specific responses to questions that it seems they are unable to stop
  + Hypersensitivity
  + Range of abilities
  + Uneven development – asynchronous development (p. 223)
* Distinguishing characteristics:
  + Speech Patterns: normal or stilted in GT vs. pedantic or seamless
  + Response to Routines: passive resistance, followed by agreement in GT vs. agitation and aggression in AS
  + Awareness of Differences: know they’re different/external disturbance in GT vs. little or no awareness of difference/internal disturbance in AS
  + Humor: socially reciprocal humor in GT vs. word play but no understanding of socially reciprocal humor in AS
  + Motor Clumsiness: not a characteristic of GT vs. 50 – 90% AS children
  + Inappropriate Insight: not a characteristic of GT vs. nearly always observed in AS
  + Insight: usually good in GT vs. usually remarkably absent in AS
  + Stereotypy: not characteristic of GT vs. may be present in AS (p. 224)
* Table of specific American Psychological Association diagnostic criteria used to diagnose AS (p. 226)
* “AS children typically have difficulties in three areas: learning, socializing, and behaviors. [Gifted] AS students can benefit by learning compensatory strategies, just as gifted students with learning disabilities do.” These strategies for the AS student must take into account the AS brain – visual, thinking in concrete, literal pictures.
* Part to whole is the best instructional style for AS students, being careful to teach strategies in “the exact sequence students will need to use them to be successful.” Rote styles of learning work with gifted AS students, where they do not with ordinary gifted students.
* “AS students are often extremely sensitive to the tone with which something is said. They respond not so much to what is said to them, but to how it is said.”
* “Extreme sensitivity to some kinds of sensory stimuli is common among children with AS” (more extreme than gifted children’s hypersensitivities). (p. 227)
* “The aim of sensory integration therapy is to move people toward a wider repertoire of skills. … Deep pressure stimulation like joint compression or hand massage can be provided at school as needed to help the AS child from becoming over-stimulated, anxious, or aggressive. Rubbing or brushing exercises are also helpful with some children.”
* “Talking about appropriate behaviors is not effective. Working with a mirror and imitative exercises can help.”
* Social Stories (Carol Gray) are useful with GT/AS children. An example of such a story:
  + “Sometimes my friend, Toni, tells me to ‘chill’. This means I am getting loud and bossy. Toni doesn’t want to sit with me when I am loud and bossy. I will lower my voice when Toni tells me to ‘chill.’ When Toni says ‘chill,’ I can imagine putting my voice on ice.”
  + “Include a ratio of one directive and/or control sentence for every 2 to 5 descriptive and/or perspective sentences.”
* “Visual supports can be remarkably effective in helping AS students organize their behavior.” Post pictures of expected behaviors where child can see them. (p. 228)
* ASPEN (Asperger’s Syndrome Education Network) is a national organization formed to provide support and information to individuals with neurological disorders like Asperger’s, High Functioning Autism, and Pervasive Developmental Disorder Not Otherwise Specified. Helpline: 904-745-6741 or <http://www.asperger.org> is the website.

Gallucci, N. T., Middleton, G., & Kline, A. (1998). Intellectually Superior Children and

Behavioral Problems and Competence, *Roeper Review*, 22(1), pp. 18-21.

* “This study evaluated differences in ratings of behavior problems and competence from the Child Behavior Checklist (CBCL) between samples of 78 children with intelligence quotients (IQs) greater than 130 and 62 children with IQs in the average range.” (p. 18)
* “As predicted, there were no reliable differences for any scales from the CBCL.”
* “The implication of this study is that indications of behavior problems on the CBCL should likely be considered evidence of actual psychopathology rather than sequelae of superior intellectual functioning.” **What do others think of the CBCL?**
* Gifted students who participated in this study were in a residential program for gifted children in Louisiana. Their CBCL ratings were compared to those of gifted students in regular classrooms in Connecticut and to the CBCL scores of children “with average levels of intellectual functioning in regular education classrooms in Connecticut.” (p. 19)

Morrison, W. F. (2001). Emotional/Behavioral Disabilities and Gifted and Talented

Behaviors: Paradoxical or Semantic Differences in Characteristics? *Psychology in the Schools*, 38(5), pp.425-431.

* EBD labeled students are referred to as being “dysfunctional, difficult, deviant, disordered, disturbed, disappointing, delinquent, dropout, disruptive, and disorganized – the Destructive D’s.” (p. 426)
* “The profile of the student labeled EBD has been negative, and leads the individual working with these students to believe in a one-dimensional view that focuses on negative behaviors that often over-shadows potential G/T behaviors of the person.”
* “Historically, the popular profile of the G/T student has concentrated on overtly positive and successful characteristics, and that students in this group share common core traits that could be utilized in classifying other students whom exhibit G/T behaviors.”
* “There continues to be limited access to G/T programming for students with challenging or negative behaviors.”
* “Seeley (1998) stated that: ‘The concept of disabled gifted may appear to be an oxymoron.’” (p. 427)
* Clinical experience has led to a belief that G/T and EBD students share at least 3 characteristics: academic ability, creative thought, and negative nad/or challenging behaviors such as “depression and anger, poor impulse control, conflict in family relations, intense emotions, polarized and hierarchical value systems, and experienced isolation from peers.”
* “The degree to which any of these characteristics are exhibited by an individual needs to be seen as unique in each case and the presence of any one characteristic, or group of characteristics, does not readily mean the student is EBD, G/T, or twice-exceptional.” (p. 428)
* Rating scales used to identify EBD students have been lists of negative behaviors and how often these behaviors are seen. “These scales have been found to be void of context in relation to the behavior exhibited and have failed to identify and/or focus on individual strengths within an individual.”
* There is a “need for professionals in the fields of special and gifted education to develop specific programs to meet the unique needs of [twice-exceptional students].”
* “… the curricula of control in the classrooms have severely restricted the opportunity for the student to exhibit and explore creative thoughts and ideas.”
* The authors suggest that identification should include a “multiple-criteria assessment such as portfolio assessment, teacher recommendations, and observations.” Observers need to look at the *context* in which behaviors are exhibited, not just the frequency. **Most teachers don’t have training to know what characteristics constitute gifted and/or EBD.**

Rizza, M. G. & Morrison, W. F. (2003). Uncovering Stereotypes and Identifying

Characteristics of Gifted Students and Students With Emotional/Behavioral Disabilities, *Roeper Review*, 25(2), pp. 73-77.

* Premise of article is that teachers are not educated in how to identify characteristics of gifted students and students with emotional/behavioral issues; therefore, students are not referred for services that will benefit them.
* The sample population for this study was 33 graduate and 59 undergraduate students from teacher preparation programs in Colorado and Indiana. The graduate students were all currently employed as teachers: 11 in regular education, 19 in special education, and 3 in gifted education. The undergraduate group was comprised of 90% regular education and 10% special education majors. (p. 74)
* “Students who do not conform to the traditional classroom setting or who have differences in learning styles may exhibit behavior disabilities that are exogenously based (inherent to the personality structure of the individual).” (p. 73)
* “Stereotypical attitudes held by teachers have led to the belief that a person with a disability cannot also be gifted.”
* “There has been inadequate training in the field of education to make teachers aware that characteristics of one exceptionality may overlap with other exceptionalities.”
* Survey instrument used was a list of characteristics that could describe either a gifted child or a child with EBD was used. Teachers were asked to classify these characteristics as gifted, EBD, both, or neither.
* Charts are in the article with the survey results by characteristic. (pp. 74-75)
* Teachers characterized Gifted Students’ behaviors as:
  + Personal power
  + Independent
  + Corrects teachers
  + High achiever
  + Develops own goals
  + Does well academically
  + Evaluative
  + Admired for abilities
  + Successful
  + Loved by teachers
  + Admired by peers
* Teachers characterized EBD Students’ behaviors as:
  + Poor self-concept
  + Unaware
  + Explosive
  + Has mood swings
  + Has poor self-control
  + Intermittent attendance
  + Is self-abusive
  + Is disruptive, acts out
  + Adults are angry with them
  + Seen as loners, dropouts, dopers, or air heads
  + Seen as dangerous and rebellious
  + Seen as weird, dumb
  + Rebellious
  + Peers see them as entertaining
  + Viewed as resistive
* **Authors considered all of the above behaviors to be characteristic of both gifted students and EBD students.**
* Be cautious in interpreting these data. Sample limitations and data restrictions inhibit generalizing the results to the general populatio

**Learning Disabilities (all kinds):**

Brody, L. E. & Mills, C. J. (1997). Gifted Children with Learning Disabilities: A

Review of the Issues, *Journal of Learning Disabilities,* 30(3), 282-286.

* The majority of students who are gifted with learning disabilities ‘fall through the cracks’ in the system.” (p. 282)
* 3 subgroups whose 2x remains unrecognized:
  + Identified as gifted yet exhibit difficulties in school – usually called underachievers
  + Learning disabilities are severe enough for diagnosis, but not identified as gifted – could be 33% of LD kids (p. 283)
  + Abilities and disabilities mask each other (could be largest group)
* Definitions of giftedness and learning disabled abound, but none seem complete to describe 2X students
* **Will curricular differentiations at end of study take into consideration students’ changing needs over time?**
* Identification protocols for gifted programs and special education services “fail to consider the special characteristics of this population.” (p. 284)
* “Many researchers in this area have focused on Wechsler Intelligence Scale for Children-Revised (WISC-R) score patterns.... To date, however, no consistent pattern of results has come from this research.” (p. 285)
* “Trying to find one defining pattern or set of scores to identify all gifted students with learning disabilities is probably futile.”
* “the use of IQ tests for identification is problematic nad has become increasingly controversial.”
* “Identifying students who have exceptional talent in a specific area … lends itself to targeted instruction and programming that is more appropriate and, ultimately, more justifiable.”

**What about aptitude testing in specific subject areas?**

* Some school districts do not allow schools to be reimbursed twice for the same student, thus precluding 2X kids from getting what they need in services. (p. 287)
* Individualized Education Programs (IEP) particularly effective for 2X students (p. 288)
* Self-contained class for 2X students with severe learning disabilities used in some school systems – ASSETS in Hawaii.
* Refers to other models being used: (1) Renzulli’s Student Enrichment Model—SEM, (2) Betts’ Autonomous Learner Model—ALM.
* “Historically, learning disabilities have been considered an invisible disorder’; the problems and needs of gifted students with learning disabilities may be the most invisible of all.” (p. 289)
* “Teachers of the gifted, however, may be particularly guilty of being unwilling to adapt to the needs of a student who is not a consistently high achiever.” (p. 290)
* “Teacher training can contribute to making teachers, whose primary responsibility is to remediate students’ deficiencies, more aware of the neds of their students who are also gifted.” (p. 291)
* Gear programs to strengths, not weaknesses.
* “Low self-concept is a common problem among gifted students with learning disabilities who have difficulty coping with the discrepancies in their abilities.”

Colarusso, C. A. (1980). Psychoanalysis of a Severe Neurotic Learning Disturbance in a

Gifted Adolescent Boy, *Bulletin of the Menninger Clinic*, 44(6), pp. 585-602.

* Freud described how internal conflict “may restrict and inhibit the functioning of the ego instead of causing neurotic symptoms.” In a child, this restriction may manifest itself as a diminishing of the child’s capacity to learn. (p. 385) “Thus, Freud’s discoveries provided the initial stimulus for the psychoanalytic study of learning and learning disorders.”
* A review of pertinent literature on neuroses, as well as the “causal relationships between unconscious emotional conflicts and attitudes and scholastic failures in certain subjects.” (p. 586 – 588)
* Description of case study of Bob’s analysis (pp. 588-600)
* “Underachievers characteristically attack their parents and society indirectly through their failure to achieve.” (p. 601)

Crim, C., Hawkins, J., Ruban, L., & Johnson, S. (2008). Curricular Modifications for

Elementary Students With Learning Disabilities in High-, Average-, and Low-IQ Groups. *Journal of Research in Childhood Education,* 22(3), 233-245.

* “Students considered gifted and learning disabled are those most at risk of not being adequately served in U.S. schools.” (p. 233)
* Refers to same three possible outcomes: gifted / no diagnosis, diagnosis / no identification as gifted, and giftedness masks so no services of any kind
* G/LD must receive “uniquely differentiated programming if they are to reach their full potential.” (p. 234)
* “Basically, there is no formal definition that has addressed the simultaneous joint considerations of characteristics of giftedness and learning disability.”
* G/LD students are not a homogenous group
* “Teachers have not been trained to recognize the broad range of characteristics that may manifest themselves” in G/LD students. (p. 235)
* Individuals With Disabilities Education Improvement Act (IDEIA, 2004): “Special education means specially designed instruction, at no cost to the parents, to meet the unique needs of a student with a disability … [as well as] appropriate adaptation in the areas of content, methodology, or delivery … [and] the area of evaluation.”
* Delivery modifications refer to “what the teacher and individuals working with the student will actually do in the classroom or educational environment … environment, pacing, directions.”
* “The literature in the field has not provided evidence that high-ability students with LD are provided for any differently in general education than their average or below-average peers with LD.” (p. 236)
* Data is broken down demographically and by levels of ability
* Participants: elementary students from two Texas suburban school districts (p. 237)
* Procedures: collected archival data from audit files, looked at IEPs
* High Ability = IQ 116+ / Average Ability = IQ 85 – 115 / Low Ability = IQ 84 – (p. 238)
* Tukey test was used (The test compares the means of every treatment to the means of every other treatment, and identifies where the difference between two means is greater than the [standard error](http://en.wikipedia.org/wiki/Standard_error) would be expected to allow.) (p. 239)
* For this study, researchers looked only at intellectual giftedness, acknowledging the existence of other areas of giftedness. (p. 240)
* Positive skew in the results “away from the high end of the intelligence spectrum” (p. 241)
* “Research indicates that, often times, these OHIs are inappropriate abels and that the placement of high-ability students with LD I appropriate programs could eliminate some of the behavioral issues.” (p 241)
* “The main differences found are that the high-ability group, in general, received fewer modifications than the other two groups.” (p. 242)

Dole, S. (2001). Reconciling Contradictions: Identity Formation in Individuals With

Giftedness and Learning Disabilities. *Journal for the Education of the Gifted*, 25(2), pp. 103-137.

* Analogy of giftedness and learning disabilities to Roman god Janus (two faces back to back, one looking inward and one looking outward) (p. 103)
* “No formal definition has been developed for combined giftedness/learning disabilities.”
* Study focused on identity formation as a “complex process involving an interaction of multiple forces, both in the sociocultural environment and within the individual.” (p. 104)
* Erickson (1991) “characterized contemporary society as ambivalent.” This ambivalence “weakens the sense of who we are.” (p. 106
* Study used narrative inquiry, believing the method to be a less fragmented view than the one formed by records, scores, and grades. (p. 107)
* Purposeful sampling was utilized (p. 108)
* Undergraduate college students who demonstrated both giftedness and learning disabilities were research participants.
* All subjects exhibited a “resistance to closure in the 95+ percentile” (of personal interest)
* Study was only 4 participants. Four case studies showed the “overwhelming impact of being gifted with learning disabilities.” (p. 131)
* “Future inquiries may want to explore the specific impact of the variables of gender; culture; ethnicity; age of identification of giftedness, learning disabilities, or both; and types of abilities and disabilities.” (p. 132)

Donahue, M. L., Szymanski, C. M., & Flores, C. W. (2001). When “Emily Dickinson”

Met “Steven Spielberg”: Assessing Social Information Processing in Literacy Contexts. *Language, Speech, AND Hearing Services in Schools,* v. 30, pp. 274-284.

* About two high school students with communication disorders who have never had a friend at school. They have a long history of oral language problems and social isolation. (p. 275)
* “Emily” is a high school student who has been singled out for services since kindergarten. In high school, she receives instruction by a “transdisciplinary team consisting of a speech-language pathologist, a deaf educator, a vocational educator, a social worker, and a classroom aide who functions as a mainstream facilitator.” **Is there any wonder she has difficulty forming peer relationships? She has (probably with good intentions by the adults in her life) been set apart from her peers all of her life and made to feel “different.”**
* She has done well in general math and physical education classes but not formed peer friendships.
* She participates in no extra-curricular activities.
* Strengths in reading, spelling, and writing
* “Emily’s reclusive style masks a rich and imaginative fantasy life enacted through her reading and writing.” (p. 276)
* Social worker suggested that Emily and Steven write a story together. They become friends, collaborating on a screenplay and a story, giggling together, and “engaging in typical teenage bantering.” (p. 281)
* **As I read this article, I wondered if the authors were ever teenagers, themselves. It seems that Emily was merely protecting herself from the pain of rejection – until she met someone who would accept her for who she was. Since she had been isolated her entire life, she needed to find someone else who had experienced similar social isolation. With him, she could “be herself.” Well-intentioned adults often make social situations worse by labeling and separating children, thus stigmatizing them.**
* Emily was involved in a role-playing situation with another student. The problem assigned to the two of them was, “You are teased by other students because you are so shy.” Her partner’s solution was “Stop being shy and ask them to stop it.” Emily suggested, “Just ignore them and forget about it” since she saw shyness as an “immutable personality trait, and said, ‘ You can’t just stop being shy.’” (p. 283)
* As Emily’s friendship with Steven progressed, she began to participate in more conversations and social interactions with other students, both male and female. **Having a friend can often do more good for a child than a cadre of “professionals.”**

Gardynik, U. M. & McDonald, L. (2004). Implications of Risk and Resilience in the Life

of the Individual Who is Gifted/Learning Disabled, *Roeper Review*, 27(4), pp. 206-214).

* “Researchers have also found that under most adverse circumstances there are protective factors that serve to buffer the individual’s response to adversity.” (p. 206)
* “There is no universal definition of resilience; however, it is delineated as ‘successfully coping with or overcoming risk and adversity, or the development of competence in the face of severe stress and hardship’.”
* “It is sometimes difficult to identify competent children because the competence level of a given child changes over time.” **But does the school’s assessment of the child also change over time or do labels follow that child through school?**
* 3 variables that serve as protective factors in a child raised in poverty:
  + Individual child temperament
  + Family context
  + Presence of external support “such as a teacher or the presence of an institutional structure that encourages ties to the community”
* Several stories from studies follow regarding resiliency in children
* “Resilient children may also attain a sense of value from reading.” They escape into an imaginary world that comforts them. (p. 207)
* American and Canadian definitions of learning disabilities are given
* “A learning disability is an adverse circumstance over which the child initially has little control. … The high level of stress associated with the school environment [for the LD child] makes school itself a risk factor.” (p. 208)
* 1999 study found that “adolescents with LD experienced higher rates of depression than students without LD.”
* “Although children with LD understand what is desirable action in a given social situation, they opt for a less competent solution.” **Why?**
* “Negative socialization in childhood [of LD children] may contribute to adjustment problems, such as dropping out of high school and juvenile delinquency.”
* “Academic assistance provided by teachers needs to be supportive of the student taking personal responsibility for academic success, thus not leading to teacher dependency.”
* 5 risk factors for academically gifted students:
  + Asynchronous development leads to a misfit among peers
  + Unrealistic expectations of adults in the child’s life, leading to “chronic power struggles, defiance, passive-aggressiveness, depression, hopelessness, underachievement, and drug and alcohol abuse.”
  + Overinvolvement of parents creating undue pressure on child, leading to “rebellion or psychological complaints such as anxiety, depression, and eating disorders.”
  + Disparity between instructional environment and capabilities of gifted child, leading to boredom “and even disengagement from school, provoking the gifted child to exhibit problem behaviors.”
  + Vulnerability to social and emotional problems “because he or she may have trouble finding an appropriate peer group.” (pp. 209-210)
* Gifted boys seem to be at a disadvantage in elementary school, but gifted girls are at a disadvantage in adolescence.
* “Academically gifted children may share many characteristics with resilient individuals: verbal ability, intelligence, risk-taking, high self-concept, good self-efficacy, academic achievement, reflectiveness, maturity, an internal locus of control, and self-understanding.”
* “Neihart (1999) found that the psychological wellbeing of the gifted child is dependent on the type of giftedness, the educational ‘fit,’ and the gifted child’s personal characteristics.”
* “The identification of the individual who is G/LD should also include personality and behavioral disturbances, in addition to depressed academic skills.” (p. 211)
* “A focus on the weaknesses of a student without a similar focus on the development of giftedness can result in poor self-esteem, lack of motivation, depression, and stress.”
* “Children who are both gifted and learning disabled have a paradoxical combination of abilities and have been described as ‘paradoxical learners’ because they are able to synthesize difficult information or understand complex math concepts while they are unable to obtain basic skills, such as spelling simple words or doing basic computations. … teachers and parents see this confusing pattern as stupidity, laziness, or willful contrariness.”
* “The ideal learning environment for the student who is G/LD focuses on the student’s strengths and interests while simultaneously addressing his or her academic deficits.”
* In a study conducted in 1990 by Minner, “teachers were less inclined to refer a child with learning disabilities for possible placement in programs for gifted students than an identically described child without learning disabilities. Teachers were also less inclined to refer a student from a poor or middle class family than an identically described student from an upper class family, although children who are gifted can be found in all social strata.”
* Gifted individuals with learning disabilities:
  + Hans Christian Andersen
  + Albert Einstein
  + Thomas Edison
  + Leonardo da Vinci
  + George Patton
  + William Butler Yeats
* “There is little empirical research on the protective factors that contribute to resilience in individuals who are G/LD.
* “Encouraging and nurturing the talents of students who are G/LD would contribute more to their success in life than equal efforts to remediate basic skills.” (p. 212)
* “It is possible that programs stressing the abilities rather than the disabilities of students who are G/LD may facilitate traits that are associated with resilience. **Of course!**
* “To facilitate resilience, children who are G/LD need to be identified as early as possible. This would require that educators be made aware of this exceptionality and consciously look for it.” (p. 213)
* “When we are looking at a student who won’t do the work, how do we know we aren’t actually seeing a child who can’t do the work?”

Hannah, C. L. & Shore, B. M. (1995). Metacognition and High Intellectual Ability:

Insights from the Study of Learning-Disabled Gifted Students, *Gifted Child Quarterly*, 39(2), pp. 95-109.

* Study of 48 school-identified learning-disabled gifted, gifted, learning-disabled, and average-performing boys in grades 5/6 and 11/12
* “Metacognitive performance of the learning-disabled gifted students resembled that of the gifted sample more than that of the learning-disabled sample.” (p. 95)
* Acknowledges the imprecise nature of the definitions of “giftedness” and “learning-disabled.”
* Students were identified initially “on the basis of psychometric assessments of IQ and performance.”
* “Metacognition has been defined as a higher level of thinking than task-specific cognitive abilities and as the deliberate control and regulation of cognitive processes while learning or performing. Some researchers have divided metacognition into two types of processes: Metacognitive knowledge and … metacognitive skills.” (pp. 95-96)
* Sternberg in 1984 hypothesized that people identified as gifted should be more proficient in their ability to recognize the problems that need to be solved, select the appropriate strategies for problem solving, and monitor their solution process.” Other subsequent studies have confirmed this hypothesis.
* “Teaching metacognitive and cognitive strategies to learning-disabled students has enabled them to be more active and this more efficient in their learning.”
* Metacognition in Learning-Disabled Gifted Students: “They are identified as a specific population needing educational opportunities that are different from programs offered for either learning-disabled or gifted students.”
* “Gifted readers have also been reported to use strategies such as predicting, evaluating, and connecting new content to prior knowledge more often.”
* Procedure for the study was discussed in great detail. (pp. 97-101)
* Analysis of the results using MANCOVA and ANCOVA analyses. (pp. 101-104)
* “The gifted and learning-disabled gifted secondary students did not perform better than the average-achieving group on metacognitive knowledge and comprehension.” This was attributed to a possible ceiling effect.
* “One of the problems researchers have noted in studying learning-disabled or gifted students is that their individual differences make it difficult to obtain significant or interpretable results.” (p. 105)
* The “Bugged” reading texts are appended to the article for Grades 4-6 and Grades 11-12. (pp. 108-109)

Hayes, P. A., Norris, J., & Flaitz, J. R. (1998). Evidence of Language Problems in

Underachieving Gifted Adolescents: Implications for Assessment, *The Journal of Secondary Gifted Education*, IX(4), pp. 179-194).

* Subjects in study were 20 13-year-olds, including 10 identified as high achieving gifted and 10 identified as underachieving. Gifted. All attended public or parochial schools in a rural southwest Louisiana parish.” 182)
* “In one study of 242 children identified as learning disabled, more than 90% were found to exhibit language deficits.” (p. 179)
* Nye (1987) conducted an analysis of 1,077 studies (involving 106,000 students with learning disabilities) and found evidence of language deficiencies in 8 out of 10 of the LD subjects.” (p. 180)
* Underachievement has been attributed to a variety of factors, including weak curricula, home environments, parental rigidity, and learning disability. Silverman suggested that researchers interested in studying gifted students with learning disabilities should view the underachieving gifted population as a source of potential subjects.”
* Description of study procedures followed. (pp. 181-185)
* A story stem was given and students were asked to orally tell the rest of the story on an individual basis in a quiet, non-distracting environment. The stem was: “Once there was a young girl who lived in the swamp with her grandfather.” (p. 185)
* Stories were analyzed based on discourse-level (story grammar) and sentence-level (complex sentence) analyses.
* A multiple analysis of variance (MANOVA) procedure was used to determine if significant differences existed between underachieving and high achieving gifted subjects. (p. 186-188)
* Results of study indicated that, “narrative language problems may be present in the underachieving gifted adolescent population when story length, episodic integrity, story grammar components, and sentence complexity are considered in combination. However, despite significant MANOVA results, [researcher] was unable to argue that the two groups studied were statistically different from each other in oral narrative abilities because none of the dependent measures, when considered individually, was found to account for the significant MANOVA results.” (pp. 188-189)
* The small sample size affected the power of the statistical measures used. Also, students declined to participate and others were chosen with somewhat higher achievement levels.
* “Descriptive language assessment procedures should be included in the educational evaluation of gifted children suspected of having learning disabilities.” (p. 190)

Kennedy, K. Y., Higgins, K., & Pierce, T. (2002). Collaborative Partnerships Among

Teachers of Students Who Are Gifted and Have Learning Disabilities, *Intervention in School and Clinic*, 38(1), pp. 36-49.

* “Strategies and ideas to help build collaborative partnerships among all teachers who work with students who are gifted and have learning disabilities.” (p. 36)
* “It is important that the curricula in [both the general classroom and the resource room setting] be modified to accommodate” twice-exceptional students. (p. 37)
* “Students who are gifted with learning disabilities often become bored, unmotivated, and sometimes exhibit behavior problems.”
* Teachers of 2X must be involved in a “collaborative process … based on continuous communication, collaborative planning, and ongoing evaluation throughout the school year.”
* “This team approach helps to ensure the success of the students in the inclusive community.”
* Continual communication among principal, previous teachers, parents, students, other teachers student may have is essential to a child’s success in school. (p. 38)
* Suggested order of teacher of gifted meetings: principal, students and parents, previous teachers of students who are gifted, create a student profile, general education teachers and special education teachers. (pp. 38-39)
* Build a relationship of trust with all members of the collaboration – be reliable, dependable, and supportive of each other.
* Form for Student Profile is included (p. 40)
* Teachers of Gifted should observe teachers in general classrooms and special education teachers, as well as students in those environments in order to form a better picture of the child. (p. 41)
* “Finding time for collaborative planning is a necessity. … Time for brief communication, even if done in passing, will prove to be valuable.”
* Form for Teacher Interview is included (p. 42)
* Form for Classroom Observation is included (p. 43)
* Form for Progress Report is included (p. 44)
* **Perhaps setting up a webpage with password protected pages for students would be an effective tool for communication also, particularly in situations where the Gifted Teacher is not resident in the school.**
* Suggestions for general modifications:
  + Always take into consideration a student’s strengths, interests, and disabilities
  + Contract with individual students to complete assignments
  + Make sure that assignments challenge the gifted student but does not interface with student’s disability
  + Allow students to skip assignments in which they exhibit proficiency
  + Provide critical but fair evaluation of student’s work (p. 45)
* All members of collaborative process should evaluate its successes and failures, strengths and weaknesses, making suggestions for changes on a monthly basis.
* Form for Request for Assistance is included (p. 46)
* Form for Student Evaluation is included (pp. 47-48)

Kokot, S. J. (2003). diagnosing and treating learning disabilities in gifted children:

a neurodevelopmental perspective. *Gifted Education International*, 17(1), pp.

42-54.

* “Clark (1992) reports an estimation of up to 300,000 children in the United States being both gifted and learning disabled and the numbers are growing.” (p. 43)
* Possible indications of learning disability in gifted children:
  + 20+ scaled score discrepancy between verbal and performance IQ
  + Average score on either verbal or performance IQ measures
  + Highest score on spatial measure with low scores occurring on the sequential measures
  + Test scores may not be the best indicator of disability
  + Multi-dimensional approach must be used
* Three distinct classifications of gifted students with learning disabilities:
  + Gifted but poor spelling and handwriting, appear disorganized, untidy work
  + Hidden gifted/learning disabled, not identified as gifted or learning disabled because abilities and disabilities mask each other
  + Recognized learning disabled placed in special education, disability preventing them from performing well on intellectual tasks even though they may excel in an area of interest and may also have good verbal skills. This group is most at risk because educators focus on disability and overlook strengths. (pp. 43-44)
* Neurodevelopment is not seen as a given sequence of accrued skills but an interactive hierarchy of brain functions, with a vestibular foundation for skills presumed by other perspectives to be isolated in particular sites in the brain. (p. 45)
* Looks at possible causes for learning disabilities as:
  + Chemicals
  + Allergens
  + Nutritional deficits
  + Indoor, inactive lifestyle
  + Decreased demand on creativity as a result of graphic media
* An interactive, non-standard protocol identifies such factors as:
  + Distractions due to tactile or auditory hypersensitivity
  + Vestibular inadequacy to support muscle tone, visual tracking, and linguistic/phonetic awareness simultaneously
  + Irregular interhemispheric integration interfering with auditory-visual sensitivity and visual-motor dysfunctions that cause irregular visual-motor feedback, etc. (pp. 45-47)
* HANDLE approach – Holistic Approach to NeuroDevelopment and Learning Efficiency (p. 45)
* HANDLE attempts to identify the root cause of a learning problem. (p. 47)
* A case study is given of a gifted child with dyslexia (pp. 48-51)

LaFrance, E. B. (1995). Creative Thinking Differences in Three Groups of Exceptional

Children as Expressed Through Completion of Figural Forms, *Roeper Review*, 17(4), pp. 248-252.

* “This research refines the criteria for identification by illustrating where [GT/LD children’s] creative thinking, as expressed through completion of figural forms, is similar to that of the gifted and where it is similar to that of children who are learning disabled.” (p. 248)
* Sample was drawn from four school districts or Boards of Education across Ontario, and included 30 LD children, 30 GT children, and 30 GT/LD children in grades 5-8, aged 9-14.
* **It is interesting to note that the LD sample consisted of 5 females and 25 males, whereas the GT sample was more evenly representative at 14 females and 16 males. The gender make-up of the GT/LD sample was not given.**
* The Torrance Tests of Creative Thinking Figural Form B (TTCT) was chosen to assess creative thinking “because of its reliability, validity tested over time, and its ability to capture the essence or all-encompassing nature of creative thinking.” (p. 249)
* The TTCT measured the following creative strengths:
  + Storytelling Articulateness
  + Synthesis of Incomplete Figures
  + Synthesis of Lines/Circles
  + Extending Boundaries
  + Fantasy
  + Emotional Expressiveness
  + Humor
  + Richness of Imagery
  + Colorfulness of Imagery
  + Internal Visualization
  + Movement or Action
  + Expressiveness of Titles
  + Unusual Visualization
* The TTCT was analyzed both quantitatively and qualitatively. (p. 250)
* “The gifted/LD tended to be similar to the gifted in certain cognition or THINKING aspects of creativity such as Storytelling Articulateness, Expressiveness of Titles, Synthesizing Circles and significantly stronger in Synthesizing Incomplete Figures.”
* “In Emotional Expressiveness, which is what Torrance called the FEELING aspect of creative thinking, the gifted/LD tended to be stronger than the other two groups.”
* “In the INTUITIVE aspects of creative thinking, the children who were learning disabled scored higher than the two gifted groups in expressing themselves through Fantasy.” (p. 251)
* In the PHYSICAL SENSING aspects of creative thinking, there were strengths in each group.
* “Obviously, one thirty-minute test does not give the whole picture of creative potential any more than an intelligence test can give the whole picture of cognition. However, the TTCT provides a valuable starting point in the hands of educators who can thereby foster creative thinking by assisting their students to integrate humor, thinking, feeling, intuition and physical sensing. By constantly adjusting their program through detailed observations over time, teachers can show different learners how to use their strengths to improve academic and social performance.”
* “The emotional fragility of students who are gifted/LD suggests that they require a ‘therapeutic climate’ where expectations are high and clearly delineated, yet encouragement is constant.” (p. 252) **Couldn’t all students benefit from such a climate?**

LaFrance, E. B. (1997). The Gifted/Dyslexic Child: Characterizing and Addressing

Strengths and Weaknesses. *Annals of Dyslexia*, 47, pp. 163-182.

* “The student who qualifies as both gifted and dyslexic often has low self-esteem and poor motivation.” (p. 163)
* “Through both quantitative and qualitative analyses, cognitive and creative thinking differences are analyzed in 90 children aged 9 to 14 years [who are gifted/dyslexic compared to those who are either dyslexic or gifted, but not both].”
* Looking at WISC-R profiles, “although academic difficulties are similar in students who are dyslexic and gifted/dyslexic, the latter exhibit strength in expressing humor, problem solving, capturing the essence of an idea, and in synthesizing dissimilar concepts.”
* Gifted/dyslexic students “express feeling s of being in control [in their writing] and in their drawings [they express] other positive and negative feelings.”
* “Like dyslexics, gifted/dyslexics express intuitive aspects of creative thinking but are somewhat stronger in gaining information through their physical senses.”
* “In all cognitive and physical sensing aspects of creative thinking, the gifted group is the strongest.”
* Teachers need all the creativity they can muster to “become professionally competent in teaching the language as it is to the child as he or she is.” (p. 164)
* “Howard Gardner noted that special educators have long known that individuals learn differently and that education is most effective when these individual differences are recognized and addressed.” **Why, then, do schools prescribe to a one size fits all approach and then wonder why some children fail? When the children fail, they are diagnosed and labeled with learning disabilities of some kind; however, if they were taught in the first place in ways compatible with their learning styles and abilities, they would do fine.**
* “Dyslexia is a neurologically based, often familial, disorder which interferes with the acquisition and processing of language. … Although dyslexia is life-long, individuals with dyslexia frequently respond successfully to tiely and appropriate intervention.” (p. 167)
* “Only five dyslexic children had more than a 17/18 point spread between Verbal and Performance; three were high verbal and two were high performance [on the WISC-R]”. (p. 171)
* “These students often need alternatives to written exams and reports in order to express, creatively, mastery of content. They also need alternative means to demonstrate in-depth research on a topic of interest.” (p. 177)
* “These students may appear to be slow to learn content, when their actual deficiency is in dealing with the basics of print rather than the complexities of content.” (p. 178)
* “Emphasis [in the curriculum] should be placed on activities that highlight abstract thinking and encourage creativity.”
* Martha Sibley is the Dyslexia Coordinator for the Child Development Division of the Scottish Rite Hospital for Children in Dallas, a school system considered as “outstanding in meeting the cognitive, academic, social, and creative needs of these exceptional children.” (p. 177)
* Sibley suggests a continuum of test accommodation:
  + Written test in same time frame as class
  + Regular written test with extra time given
  + Regular written test with teacher’s assistance in reading words or paraphrasing questions
  + Audio tape of the test while reading the test, regulating the tape recorder to work at his own pace
  + Test is read to the student, paraphrasing questions as needed, with student writing answers to questions.
  + Questions read to student, paraphrasing questions as needed, with answers given orally by student and written verbatim by someone acting as “secretary”
  + Shortened version of written test
  + Written test on which teacher has “starred” key items. After student answers starred items, he attempts to answer other items.
  + Short version of the regular test with test times limited to a few matching, multiple choice, and true or false
  + Individually administered short, oral exam to the student who responds
* Honolulu private school for children who are gifted, dyslexic, or gifted/dyslexic is highlighted. (p. 179)
* Honolulu school’s teachers use “thematic, multisensory approach to teach all three groups [using the] Orton-Gillingham approach, combined with interests and strategies to create a differentiated-integrated curriculum.”
* “Also, enrichment is school-wide and mentors in the community take their roles seriously. The ‘climate’ is democratic and encouraging at all times.” (p. 180)

Lovett, B. J., Lewandowski, L. J. (2006). Gifted Students With Learning Disabilities:

Who Are They? *Journal of Learning Disabilities*, 39(6), pp. 515-527.

* “We argue that an uncritical acceptance of the concept of concomitant giftedness and LD has led to unsound identification procedures and to interventions that are not targeted properly.” (p. 515)
* Proactive attempts to find the “Gifted Handicapped” didn’t occur before the mainstreaming movement. (p. 516)
* “Davis and Rimm emphasized that identifying giftedness in students with disabilities requires procedures different from those in a typical giftedness assessment. Specifically, they recommended the use of behavior rating scales, creativity inventories, peer or self-nominations, and prolonged student observation.”
* “Gifted handicapped” movement began with children with physical and sensory disabilities, but soon grew to include those with LD.
* Thompson, in 1971, Bjork, in 1997, and Elkind, in 1973, provided biographical sketches of Thomas Edison, Albert Einstein, Harvey Cushing, William James, Winston Churchill, Igor Sikorsky, and others with “special reference to [their] isolated deficits.”
* Two books are noted: *Learning-Disabled/Gifted Children: Identification and Programming* (Fox, Brody, & Tobin, 1983) andTeaching *the Gifted/Learning Disabled Child* (Daniels, 1983).
* NAGC described 3 kinds of G/LD students in 1998: “(1) identified gifted students who have subtle learning disabilities, (2) students with a learning disability but whose gift has not been identified, and (3) unidentified students whose gifts and learning disabilities may be masked by average school achievement.” (p. 517)
* The article looks at the recommendations of Brody and Mills (1997), McCoach, et al. (2001), Nielsen (2002), and Silverman (2003).
* Scatter Analysis: Ability test scatter and range is a popular way to identify students who have LD and G/LD students. The clinician looks for “the size of the difference between the child’s highest and lowest subtest scores. … larger score ranges make LD status more probable.” (p. 518)
* “Scatter in itself should hardly raise a red flag for a diagnostician.”
* Because high-ability students’ subtest scores will show more extreme scatter, they would be likely to qualify as LD whether or not they have one. (p. 519)
* Referring to subtest differences, “Why is someone who is average in spelling but outstanding in reading comprehension and math considered disabled in spelling—why is he or she not just considered to be unusually good at math and reading comprehension?”
* Profile Analysis: similar to scatter analysis, but examines clusters of subtests in various tests or batteries.
* “Often, profile analysis is associated with a neuropsychological conceptualization of LD.
* “It is unclear whether the same profile of strengths and weaknesses would result if the same tests were given twice to the same child on a different day, or if two different cognitive ability tests were given to the same child.”
* It is difficult to do profile analysis on a group (G/LD) that has no specific profile.
* “Any diagnostically valuable profiles would have to be validated through studies that form a G/LD group based on one set of objective criteria (*not* on the hypothesized test profile), and then examine heir psychoeducational test performance on independent measures.” Apparently, no one has done this yet. (p. 520)
* “To remedy this narrowness [using IQ tests for giftedness identification], two sets of practices have become popular: the administration of standardized measures other than IQ tests, and the use of recommendations from individuals who know the child.” **But then we still judge the child’s giftedness based on his or her academic success.**
* “Any criticisms leveled against IQ tests must be weighed against their considerable advantages.”
* “The Full Scale IQ score explains approximately one quarter of the variability in performance at school.”
* “Individually administered intelligence tests are indeed weighted toward verbal, mathematical, and visual-spatial abilities, but it is those abilities that appear to matter a great deal at school and, later on, at work.” **Really? Should this be the case? It excludes the artistically or athletically gifted individual and diminishes his or her talents.**
* “The acceptance of students with artistic talent or leadership capability as gifted makes it unclear whether most students would not fall into a ‘gifted’ classification, so long as they have *some* area of high ability, achievement, knowledge, or talent.” (p. 521)
* “The specific tests that are chosen often determine whether a discrepancy is found, and so school psychologists will often search for tests that lead to a discrepancy if the school wishes to make a diagnosis of LD.” **WOW!**
* “Discrepancy formulas are based on misunderstandings about the nature of intelligence and IQ tests.”
* “If this idea of impairment [IDEA; 1997] (in an absolute sense, relative to the general population) is ignored, if discrepancies alone are used, and if the right mixture of ability and achievement tests are chosen, a majority of gifted students could be classified as having LD.”
* The authors warn that if we are not careful, we will set up a situation whereby anyone who wants a diagnosis/identification of G/LD can justify it: a student with average IQ and average achievement could claim giftedness is suppressed by LD, yet disability is evidenced by merely average scores instead of below average ones. (p. 522)
* Suggested Need for Research: (1) base-rate data on gifted children’s ability and achievement profiles and discrepancies; (2) investigation of students who meet most conservative criteria for G/LD status; (3) An attempt to test the controversial “masking hypothesis” and; (4) an examination of the response to treatment. (pp. 523-524)

McCoach, D. B., Kiehle, T. J., Bray, M. A., Siegle, D. (2001). Best Practices in the

Identification of Gifted Students With Learning Disabilities,*Psychology in the Schools*, 38(5), pp. 403-411.

* “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.” (p. 403)
* Referring to U.S. Department of Education’s 1993 definition of giftedness: “The exhaustive nature of the definition makes it difficult to operationalize in schools.”
* Article considers only intellectual giftedness. (p. 404)
* No universally agreed upon definition of intellectual giftedness. In 1989, Borland referred to this phenomenon as “geographic giftedness.”
* “For this article, we define intellectual giftedness as an outstanding ability to grapple with complexity.”
* “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.”
* Qualitative differences of gifted children “suggest that gifted children possess an intense drive to master new concepts, require little explicit instruction, and often pose deep philosophical questions.” **Why, then, do we expect their behavior, attitudes, and social interactions to be the same as children who are not gifted? Why can’t we accept that they are different in other ways, as well, but not in need of “diagnosis”?**
* USOE 1977 definition of a specific learning disability **32 year old definition**
* “Most states include some mention of ‘processing deficits’ in their definition or identification criteria. … However, exactly what qualifies as a processing deficit remains vaguely defined.”
* 3 different types of G/LD students: LD, not identified as G; LD and G but compensates, so is not diagnosed with LD; LD and G but never identified as either. (p. 405)
* Central tenet in literature: “The concept that intellectual giftedness masks learning disabilities and that learning disabilities mask giftedness.”
* “We also assert that students with high measured ability who achieve at an average level may or may not be learning disabled.” (p. 406)
* “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 who are at risk for hidden learning disabilities.”
* Several authors suggest “that a 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. … although this idea may be intuitively appealing, it becomes problematic for practitioners who work with the child.”
* “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.” (p. 407)
* Based on research, “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.”
* “We discourage the use of profile analysis to detect the presence of learning disabilities in students under any circumstances.” (p. 408)
* Do a complete assessment battery: behavioral observations, an individual intelligence test, measures of cognitive processing, and a full achievement battery. … In addition, evaluations should include measures of the student’s functional level within the district’s curriculum in any areas of suspected disability.”
* “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.”
* “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.” (p. 409)
* “It may be inappropriate to place gifted students with learning disabilities into special classes or traditional instructional programs designed for students with learning disabilities. … Many gifted students with learning disabilities may be best served by receiving extra, differentiated support within the regular educational setting.” (pp. 409-410)

Schiff, M. M., Kaufman, A. S., Kaufman, N. L. (1981). Scatter Analysis of WISC-R

Profiles for Learning Disabled Children with Superior Intelligence, *Journal of Learning Disabilities*, 14(7), pp. 400-404.

* 2E kids have “rarely been investigated empirically” (p. 400)
* Study looked at intelligence test profiles of 30 “uneven gifted” children
* Children studied were from: (a) school system, (b) large child psychiatric clinic, (c) Schiff’s private psychiatric practice (p. 401)
* Average age: nearly 10
* IQ above 120
* Average of one year above grade level on Key Math test and two years above grade level on Woodcock Reading Mastery Test
* “The areas of weakness for the group of superior-IQ LD children are virtually identical to the deficiencies for conventional samples of reading disabled and LD children.” (p. 402)
* “The strengths of the LD sample with high IQs seem to be more influenced by their cultural background and home environment, whereas their weaknesses apparently are primarily a function of their learning disability.” (p. 403)
* “Naglieri’s sample had more scatter than the standardization sample, but did not differ significantly from a local control group of apparently normal youngsters.”
* “There is some evidence that high IQ children, in general, have more than typical scatter in their profiles.”
* “All expressed a sense of unhappiness and many felt they did not fit in anywhere.”
* “The group of superior-IQ LD children exhibited excellent verbal comprehension and expression skills and many creative talents, but they evidenced weaknesses in the cognitive area of sequencing, in motor coordination activities, and in their emotional development. In many ways, the emotional concomitants of these LD children seemed striking in their severity and were apparently more exaggerated in the pervasiveness of their impact than is typical for conventional LD populations.”

Shaywitz, S. E., Holahan, J. M., Freidenheim, D. A., Fletcher, J. M., Makuch, R. W., &

Shaywitz, B. A. (2001). Heterogeneity Within the Gifted: High IQ Boys Exhibit Behaviors Resembling Boys With Learning Disabilities, *Gifted Child Quarterly*, 45(1), pp. 16-23.

* 4 groups of 87 boys: High Gifted (IQ 140-154), Low Gifted (IQ 124-139), Learning Disabled, and a Normal control group. (p. 16)
* “Findings indicated that High Gifted boys exhibit levels of behavior problems similar to the Learning Disabled, whereas Low Gifted boys demonstrate significantly lower levels of behavioral problems than do the Learning Disabled boys.”
* **Interesting study in that it looks at the heterogeneity of gifted populations.**
* 13 different scales were used
* Parents of highly gifted boys, as well as teachers, view them as “difficult.”
* “Parenting highly gifted children may be a difficult experience.”
* “The importance of the increased activity association with exploration and experimentation in the highly gifted is that it may produce potential misinterpretation and difficulties in the school and within families.” (p. 16)

Tallent-Runnels, M. K. & Sigler, E. A. (1995). The Status of the Selection of Gifted

Students with Learning Disabilities for Gifted Programs, *Roeper Review*, 17(4), pp. 246-248.

* Gifted program coordinators from 386 school districts in Texas were the subjects. All 20 service center regions of the state were represented with an average of 19.3 districts per region responding. (p. 246)
* Study references Boodoo’s 1989 Texas study summarized above.
* Gifted programs are mandated in Texas public schools, K-12. Guidelines are also mandated to consider special populations of students for gifted programs.
* 19.7% of the responding districts indicated that they had students with learning disabilities in their gifted programs. 80.3% had not placed GT/LD students in their gifted programs. (p. 247)
* “20 respondents asked for information or assistance to modify their identification procedures for selecting gifted children with learning disabilities. Others said the tests they used prohibited placement for these children and that those with learning disabilities could not function in the gifted program. Still others contended that if these students were successful enough to qualify for the gifted program, then they did not need other special education services.”
* “Districts that identified only 1% - 5% [for gifted programs] were the least likely to identify gifted children with learning disabilities among those identified gifted students.”

Volker, M. A., Lopata, C., & Cook-Cottone, C. (2006). Assessment of Children With

Intellectual Giftedness and Reading Disabilities, *Psychology in the School*, 43(8), pp. 855-869.

* “Gifted” means intellectually gifted in this article (p. 856)
* CHC Theory of Giftedness:
  + General Intelligence (top of hierarchy in Stratum III)
  + 8-10 broad ability factors (Strata II)
  + 70 narrow abilities (Strata I)
  + CHC definition of giftedness: “those who have demonstrated (1) Superior potential or performance in general intellectual ability (Stratum III) and/or (2) Exceptional potential or performance in specific intellectual abilities (Stratum II) and/or (3) Exceptional general or specific academic aptitudes (Strata I and II)” (p. 857)
* PASS Theory of Giftedness:
  + 2- level model -- General Intelligence sits at the top and the four PASS abilities of Planning, Attention, Simultaneous, and Successive at the level below
  + PASS model “allows for a conception of general and more specific intellectual gifts.”
* Legal Definition of SLD: “A disorder ‘in one or more basic psychological processes’ with associated inclusive and exclusionary criteria is still central to the definition (see IDEA 2004, Part A, Sec. 602).” (p. 858)
* Research Based SLDs in Reading: dyslexia, language learning disability (pp. 858-859)
* Psychometric Convergence Model of SLD Applied to Reading: “The KABC-II, in particular, highlights the potential overlap in constructs between the CHC and PASS models; however, attempting to classify abilities from both models for all tests exceeds the scope of this article.” (p. 860)
* “RTI is a systematic and data-based method for identifying, defining, and resolving students’ academic and/or behavioral difficulties”
* RTI Tier 1: “all students receive high-quality, systematic, and evidence-based instruction in the general education setting provided by the general education teacher.”
* RTI Tier 2: “Students determined to be unresponsive to instruction in Tier 1 receive Tier 2 intervention … in smaller group formats.” (p. 861)
* RTI Tier 3: “Tier 3 is generally used for further assessment to determine the possible presence of a disability.”
* “Gifted children tend to score better on the Verbal Comprehension Index (VCI) and Perceptual Reasoning Index (PRI) of the WISC-IV and relatively lower on the Working Memory Index (WMI) and Processing Speed Index (PSI).”
* Article talks about “masking” and “compensation” (p. 862)
* “Requiring a normative deficit in achievement, … RTI treats all children as if they are of average ability.”
* “RTI, as it is currently conceptualized, is best suited for identifying children who are having learning difficulties; however, on its own, RTI is not particularly well suited for identifying gifted children at Tiers 1 and 2.” (p. 863)
* 3 categories of gifted/SLD are discussed (p. 864)
* Authors suggest that further research needs to be done on the efficacy of looking at patterns of declining achievement as indicators for SLD in gifted child (p. 865)
* “The child’s social and emotional needs should be specifically evaluated and taken into consideration in educational planning”
* Pages 866 and 867 summarize entire article in bullet form

Yates, C. M., Berninger, V. W., & Abbott, R. D. (1995). Specific Writing Disabilities in

Intellectually Gifted Children; *Journal for the Education of the Gifted*, 18(2, pp.

131-155).

* Compared 10 gifted and 10 average children in grades 1 – 6. (p. 131)
* Administered a battery of writing and writing-related measures validated in prior research with 300 primary grade children and 300 intermediate grade children. The tests included tests of both low-level and high-level processes involved for writing.” (p. 132)
* “Results supported our hypothesis that gifted and average children differ in higher level cognitive processes but not in lower level processes in writing.” (p. 131)
* Researchers decided that, “definitions based on absolute criteria (low-functioning independent of IQ) would most likely identify writing disabilities in average children, whereas definitions based on relative criteria (discrepancy between achievement and IQ) would most likely identify writing disabilities in gifted children.” (p. 133)
* “When researcher-criteria are used [to identify students with learning disabilities] equal numbers of girls and boys are identified; whereas when school-criteria are used, more boys are qualified for special education.” (p. 134)
* “Children who are classified as learning disabled probably have extreme deficits in many rather than a single or a few isolated skills.”
* Sample consisted of 120 students – 20 from each of the first through sixth grades – drawn from a larger study of 600 students … from 5 urban and suburban schools. None of these children was receiving special education services.”
* Demographics of subjects are given. (p. 135)
* The battery of measures assessed six component writing skills: handwriting, spelling, compositional fluency, sentence complexity, vocabulary sophistication, and compositional quality. It also assessed developmental skills related to writing. “Vocabulary sophistication, compositional quality, and Verbal IQ tap high-level processes, but the remaining measures in this battery tap low-level processes.”
* A description of each measure used is given. (pp. 136-139)
* Procedures:
  + Primary students were given measures individually in 2 one-hour sessions
  + Intermediate students were given measures in 2 45-60 minute group sessions plus 1 45-minute individual session. (p. 139)
  + Because of IQ controversy in defining learning disability, study used “both a relative criterion (discrepancy between IQ and achievement) and an absolute criterion (lowest 5% of the distribution) to identify children with specific writing disability.” (p. 140) **What if none of the children had a learning disability? There still would be a bottom 5% and study would assume they did have LD.**
  + “Rather than using traditional regression for evaluation of discrepancies between IQ and achievement, we used the Mahalanobis statistic [thus seeing a bi-directional relationship between IQ and achievement as well as being able to generalize] beyond the specific IQ values in this study.”
* Specific analysis of results (pp. 140-146)
* Gifted students displayed greater high-level skills of vocabulary sophistication and composition quality. (p. 146-147)
* “It follows that for gifted children, specific writing disabilities likely result from deficits in low-level skills rather than in high-level skills. **Why?**
* 3 major implications of study for teachers:
  + A distinction should be drawn among gifted students between text generation and transcription.
  + Teachers should be cognizant of the potential frustration of gifted children struggling with such low-level disabilities. Creative children are likely to be very frustrated by their inability to adequately represent their ideas on paper in a way that meets parent, teacher, and peer expectations.” These students need to be taught the basic skills or ways to compensate for these deficiencies.
  + Teachers should not assume that all gifted children have the basic low-level mechanical skills of writing. These skills are often assumed and not taught to GT, the focus being on high-level skills and creativity.
* In explaining how he got past his writer’s block, one student replied, “I put 100 sticks of dynamite in the writer’s block and it blew up!” (p. 149)
* “When specific writing disabilities exist in gifted children, their teachers, specialists, and parents should be careful not to ignore basic low-level skills, which may hold the key to setting free the cognitive and creative potential waiting to manifest itself in written expression.” (p. 150)

**Risk and Resilience:**

Dole, S. (2000). The Implications of the Risk and Resilience Literature for Gifted

Students With Learning Disabilities, *Roeper Review*, 23(2), 91-96.

* Early research focused on risk factors, while recent research is focusing on resilience. (p. 91)
* 3 categories of protective factors:
  + Personality factors
  + Family cohesion and lack of disharmony
  + External support systems
* It is important to note that a risk factor in one situation can be a protective factor in another.
* In a longitudinal study of at-risk babies born in Hawaii, a shifting balance was found. “During the first decade, boys appeared to be more vulnerable … During the second decade and especially at late adolescence, the balance shifted in favor of the boys. … However, the balance appeared to shift once again at age 30 in favor of females.” (p. 92)
* “There is disagreement in the literature as to whether giftedness increases vulnerability or strengthens resilience.”
* Gifted Latino young men described “family support, other supportive adults and involvement in a variety of extra-curricular activities and summer enrichment programs” as protective buffers.
* Resilient African American youth “have characteristics that are culturally specific. They often assume bi-cultural identity or put on a façade of racelessness. It has also been found that emotional and physical support from their African American peers contributed to their resiliency.” (p. 93)
* Children with learning disabilities scored lower than the controls on self-efficacy, self-assurance, and interpersonal skills while in school. By the time they reached age 32, however, their lives had improved considerably.
* “Ongoing parental understanding and support is perhaps the most important protective factor as it is most frequently mentioned in studies on resiliency.”
* Early identification of LD and giftedness is key.
* Emphasize what a child can do rather than what a child cannot do.
* Intervention programs must “ activate the sources of support, such as family support, that already exist to improve the child’s cognitive skills and enhance self-esteem and self-efficacy.” (p. 94)
* An adult who grew up gifted with learning disabilities: “Healing the emotional wounds has required forgiving those who didn’t know any better and making peace with my worst unrelenting critic all those years … myself.”
* Curriculum adjustments must focus on the interests of these students.
* “Research has indicated that for students who are gifted with learning disabilities, affective needs may need to be addressed even before academic ones. **This seems key to me.**
* “Self-knowledge is a necessary precursor to self-acceptance, frequently appearing in the resilience studies on individuals with learning disabilities.”
* “Interests and hobbies out side of school play a key role in effective intervention designed to nurture abilities and develop self-esteem and self-efficacy in gifted students with learning disabilities.” (p. 95) **Is this going to be a component of the parent “classes” of PROJECT 2 EXceL?**
* “It is clear from the research that the whole person in his or her whole environment, not just the school environment, must be addressed.”
* “The resilient individuals had at least one person in their lives who accepted them unconditionally.”

Gardynik, U. M. & McDonald, L. (2004). Implications of Risk and Resilience in the Life

of the Individual Who is Gifted/Learning Disabled, *Roeper Review*, 27(4), pp. 206-214).

* “Researchers have also found that under most adverse circumstances there are protective factors that serve to buffer the individual’s response to adversity.” (p. 206)
* “There is no universal definition of resilience; however, it is delineated as ‘successfully coping with or overcoming risk and adversity, or the development of competence in the face of severe stress and hardship’.”
* “It is sometimes difficult to identify competent children because the competence level of a given child changes over time.” **But does the school’s assessment of the child also change over time or do labels follow that child through school?**
* 3 variables that serve as protective factors in a child raised in poverty:
  + Individual child temperament
  + Family context
  + Presence of external support “such as a teacher or the presence of an institutional structure that encourages ties to the community”
* Several stories from studies follow regarding resiliency in children
* “Resilient children may also attain a sense of value from reading.” They escape into an imaginary world that comforts them. (p. 207)
* American and Canadian definitions of learning disabilities are given
* “A learning disability is an adverse circumstance over which the child initially has little control. … The high level of stress associated with the school environment [for the LD child] makes school itself a risk factor.” (p. 208)
* 1999 study found that “adolescents with LD experienced higher rates of depression than students without LD.”
* “Although children with LD understand what is desirable action in a given social situation, they opt for a less competent solution.” **Why?**
* “Negative socialization in childhood [of LD children] may contribute to adjustment problems, such as dropping out of high school and juvenile delinquency.”
* “Academic assistance provided by teachers needs to be supportive of the student taking personal responsibility for academic success, thus not leading to teacher dependency.”
* 5 risk factors for academically gifted students:
  + Asynchronous development leads to a misfit among peers
  + Unrealistic expectations of adults in the child’s life, leading to “chronic power struggles, defiance, passive-aggressiveness, depression, hopelessness, underachievement, and drug and alcohol abuse.”
  + Overinvolvement of parents creating undue pressure on child, leading to “rebellion or psychological complaints such as anxiety, depression, and eating disorders.”
  + Disparity between instructional environment and capabilities of gifted child, leading to boredom “and even disengagement from school, provoking the gifted child to exhibit problem behaviors.”
  + Vulnerability to social and emotional problems “because he or she may have trouble finding an appropriate peer group.” (pp. 209-210)
* Gifted boys seem to be at a disadvantage in elementary school, but gifted girls are at a disadvantage in adolescence.
* “Academically gifted children may share many characteristics with resilient individuals: verbal ability, intelligence, risk-taking, high self-concept, good self-efficacy, academic achievement, reflectiveness, maturity, an internal locus of control, and self-understanding.”
* “Neihart (1999) found that the psychological wellbeing of the gifted child is dependent on the type of giftedness, the educational ‘fit,’ and the gifted child’s personal characteristics.”
* “The identification of the individual who is G/LD should also include personality and behavioral disturbances, in addition to depressed academic skills.” (p. 211)
* “A focus on the weaknesses of a student without a similar focus on the development of giftedness can result in poor self-esteem, lack of motivation, depression, and stress.”
* “Children who are both gifted and learning disabled have a paradoxical combination of abilities and have been described as ‘paradoxical learners’ because they are able to synthesize difficult information or understand complex math concepts while they are unable to obtain basic skills, such as spelling simple words or doing basic computations. … teachers and parents see this confusing pattern as stupidity, laziness, or willful contrariness.”
* “The ideal learning environment for the student who is G/LD focuses on the student’s strengths and interests while simultaneously addressing his or her academic deficits.”
* In a study conducted in 1990 by Minner, “teachers were less inclined to refer a child with learning disabilities for possible placement in programs for gifted students than an identically described child without learning disabilities. Teachers were also less inclined to refer a student from a poor or middle class family than an identically described student from an upper class family, although children who are gifted can be found in all social strata.”
* Gifted individuals with learning disabilities:
  + Hans Christian Andersen
  + Albert Einstein
  + Thomas Edison
  + Leonardo da Vinci
  + George Patton
  + William Butler Yeats
* “There is little empirical research on the protective factors that contribute to resilience in individuals who are G/LD.
* “Encouraging and nurturing the talents of students who are G/LD would contribute more to their success in life than equal efforts to remediate basic skills.” (p. 212)
* “It is possible that programs stressing the abilities rather than the disabilities of students who are G/LD may facilitate traits that are associated with resilience. **Of course!**
* “To facilitate resilience, children who are G/LD need to be identified as early as possible. This would require that educators be made aware of this exceptionality and consciously look for it.” (p. 213)
* “When we are looking at a student who won’t do the work, how do we know we aren’t actually seeing a child who can’t do the work?”

**ature Review**

**BOOKS**

Webb, J. T., Amend, E. R., Webb, N. E., Goerse, J., Beljan, P., Olenchak, F. R. (2005).

Misdiagnosis and Dual Diagnoses of Gifted Children and Adults, Scottsdale, AZ: Great Potential Press.

* “This book describes a modern tragedy. Many of our brightest, most creative, most independent thinking children and adults are being incorrectly diagnosed as having behavioral, emotional, or mental disorders. They are then given medication and/or counseling to change their way of being so that they will be more acceptable within the school, the family, or the neighborhood, or so that they will be more content with themselves and their situation.” (p. xxxiii)
* “We discovered that many of these patients had been seriously misdiagnosed – that, in fact, they were gifted individuals who were in situations in which the people around them did not sufficiently understand or accept behaviors that are inherent to people who are intellectually or creatively gifted.” (p. xxiv)
* “My four-year graduate program had full accreditation by the American Psychological Association to train doctoral level clinical psychologists. … Then, during the last five minutes, the professor said, ‘Oh, by the way, I need to tell you a little about the children, themselves. … So you don’t need to worry about them in your clinical practice.’ … If you are testing such a children the Weschler Intelligence Scale ort similar test, you can stop testing once you get to IQ 130 because the scores above that level don’t matter.’” (p. xxvii)
* “Most clinical psychologists, clinical social workers, psychiatrists, pediatricians, or other health care professionals today get no information during their training about characteristics and special needs of gifted children or gifted adults.” (p. xxviii)
* “Dr. Leta Hollingworth … in the 1920s … pointed out that there is an optimal range of intelligence – in IQ terms, between 120 and 145 – a range, she said, where people generally are at little risk under ordinary circumstances. She further speculated that it is from this range that most of the leaders of our society emerge.” (p. xxix) She also spoke about learning to “tolerate fools gladly.” **This has been oft quoted, but is actually is from the Bible: New Testament St. Paul, in 2 Corinthians, 11:19....** “**For ye suffer fools gladly, seeing ye yourselves are wise.”**
* “By the time [2X children] reach third grade, many are under-achieving and, because of that, are unlikely to be included in any special school program designed for gifted students. Some children who are otherwise qualified to receive specialized educational services for gifted students are excluded because of social, emotional, or behavioral problems, despite laws or regulations to the contrary.” (p. xxxi)
* “Groups of children who are gifted but not identified as such by their schools have received few empirical studies. … Children not identified and/or not properly served are likely to experience more difficulties in school and, possibly, in life.” (p. xxxii)
* “Intellectually, profoundly gifted children – particularly those who score an IQ above 165 – are so clearly different that we might call them prodigies.” (p. 2)
* “Whatever the underlying reason, the practicality is that thre seems to be a notable ‘bump’ on the normal IQ curve at about 160, and clearly, such individuals are not as rare as many professionals believe.” (p. 3)
* “Intelligence tests seldom adequately measure ‘talents’ in individual areas) particularly leadership or musical or physical talents).”
* Behavioral characteristics of gifted children, “many of which may prompt a referral to a health care professional, only to be subsequently misinterpreted as a behavior disorder”:
  + Unusually large vocabularies and complex sentence structure
  + Greater comprehension of subtleties of language
  + Longer attention span; persistence
  + Intensity and sensitivity
  + Wide range of interests
  + Highly developed curiosity and limitless questions
  + Interest in experimenting and doing things differently
  + Tendency to put ideas or things together in ways that are unusual, not obvious, and creative (divergent thinking)
  + Learn basic skills more quickly, with less practice
  + Largely teach themselves to read and write as preschoolers
  + Able to retain much information; unusual memory
  + Have imaginary playmates
  + Unusual sense of humor
  + Desire to organize people and things, primarily through devising complex games (pp. 4-5)
* Frequent referral problems for gifted children:
  + High activity level and low impulse control
  + Seriousness – continual worry about moral, ethical, or philosophical questions
  + Very little common sense
  + Perfectionist expectations of self and others
  + Nightmares, night terrors
  + Picky and sensitive (demands tags be cut out of shirts, lights be low…)
  + Too emotional
  + Forgets to turn in work that was completed; trouble staying on track; disorganized and/or messy
  + Narcissistic and overly self-absorbed
  + Difficulty relating to age peers
  + Won’t do homework
  + Always looking to outsmart adults
  + Angry and impatient
  + Very bright but has poor handwriting
  + Chronic daydreamer
  + Moody and even explosive at times (pp. 5-7)
* “We are not attempting to explain away real psychological or medical disorders. However, we *do* believe that the characteristics of gifted children and adults themselves can sometimes imply pathology where there is none.” (p. 8)
* “A child with psychomotor overexcitability has a particularly high potential of being misdiagnosed as ADD/ADHD.” (p. 14)
* Children or adults who experience overexcitabilities “can focus better on tasks when their hands or mouths are busy. Some teachers have begun allowing children to use props in the classroom, placing squeezy balls on the chalkboard tray for kids to pick up, as needed, so that their hands can be busy during class without disrupting others.” (p. 16)
* Issues related to Auditory-Sequential and Visual-Spatial learning styles. (pp. 17-22)
* *Some of My Best Friends Are Books* (Halsted, 2002) explains the phenomenon of gifted children immersing themselves in books when peers do not have similar interests. (p. 23)
* “We still group children in school strictly by age, a practice that has probably lost its usefulness for both academic and social reasons. … Most gifted children in the regular classroom spend one-fourth to one-half of their time waiting for others to catch up to their level of competence.” (pp. 23-24)
* Asynchronous development – “many children, as they grow older, find that the abilities that once lagged behind do catch up.” (p. 25)
* “IQ subtest scores frequently differ significantly, ranging from average levels to scores that exceed the scoring tables. Discrepancies such as this can indicate learning disabilities, even though the lowest of the ability level scores may be in the average range.” (p. 26) **This makes no sense to me. If the child is developing asynchronously, it would stand to reason that some scores would be lower than others. We accept that. Research has also shown that those abilities that lagged behind usually catch up. Why, then, do we then look at these low subtest scores as a possible sign of a learning disability?**
* “In general, the brighter the child, the greater the gap between judgment and intellect.” (p. 27)

**Literature Review Summary**

**Table of Contents**

Journal Articles on Twice Exceptionalities . . . . . . . . . . . . . . . . . . . . . . . . . . 1 – 10

* + “Gifted Children With Attention Deficits: Fact or Fiction?

Or Can We See the Forest for the Trees?”

* + “The Participation of Gifted Students with Disabilities in

Gifted Programs”

* + “Inclusion for Children with Dual Exceptionalities”
  + “Multiple Exceptionalities: A Case Study”
  + “Creating a Toolkit for Identifying Twice-Exceptional

Students”

* + “The Case Law on Gifted Education”

Journal Articles on ADD/ADHD . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 11 – 19

* + “Diagnosis of ADHD Among Gifted Children in Relation to

KEDI-WISC and T.O.V.A. Performance”

* + “The Gifted Child with Attention Deficit Disorder: An Identification

and Intervention Challenge”

* + “Gifted Children with ADHD”
  + “Gifted Children With Attention-Deficit/Hyperactivity Disorder”
  + “Emotional and Social Characteristics of Boys With AD/HD

and Giftedness: A Comparative Case Study”

* + “Learning and Motivational Characteristics of Boys With

AD/HD and/or Giftedness”

Journal Articles on Autism Spectrum Disorders . . . . . . . . . . . . . . . . . . . . . 20 – 25

* + “A Profile of Gifted Individuals With Autism: The Twice-

Exceptional Learner”

* + “Asperger’s Syndrome in Gifted Individuals”
  + “The Gifted Side of Autism”
  + “Gifted Children With Asperger’s Syndrome”

Journal Articles on EBD . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 26 – 28

* + “Intellectually Superior Children and Behavioral Problems and

Competence”

* + “Emotional/Behavioral Disabilities and Gifted and Talented

Behaviors: Paradoxical or Semantic Differences in Characteristics”

* + “Uncovering Stereotypes and Identifying Characteristics of Gifted

Students and Students With Emotional/Behavioral Disabilities”

Journal Articles on Learning Disabilities of all Kinds . . . . . . . . . . . . . . . . . . 29 – 49

* “Gifted Children with Learning Disabilities: A Review of the

Issues”

* “Psychoanalysis of a Severe Neurotic Learning Disturbance

in a Gifted Adolescent Boy”

* “Curricular Modifications for Elementary Students With Learning

Disabilities in High-, Average-, and Low-IQ Groups”

* “Reconciling Contradictions: Identity Formation in Individuals With

Giftedness and Learning Disabilities”

* “When ‘Emily Dickenson’ Met ‘Steven Spielberg’: Assessing Social

Information Processing in Literacy Contexts”

* “Implications of Risk and Resilience in the Life of the Individual Who is

Gifted/Learning Disabled” (appears in Risk and Resilience section also)

* “Metacognition and High Intellectual Ability: Insights from the Study of Learning-Disabled Gifted Students”
* “Evidence of Language Problems in Underachieving Gifted Adolescents:

Implications for Assessment”

* “Collaborative Partnerships Among Teachers of Students Who Are Gifted

and Have Learning Disabilities”

* “diagnosing and treating learning disabilities in gifted children: a

neurodevelopmental perspective”

* “Creative Thinking Differences in Three Groups of Exceptional Children

as Expressed Through Completion of Figural Forms”

* “The Gifted/Dyslexic Child: Characterizing and Addressing Strengths

and Weaknesses”

* “Gifted Students With Learning Disabilities: Who Are They?”
* “Best Practices in the Identification of Gifted Students With Learning

Disabilities”

* “Scatter Analysis of WISC-R Profiles for Learning Disabled Children

with Superior Intelligence”

* “Heterogeneity Within the Gifted: High IQ Boys Exhibit Behaviors

Resembling Boys With Learning Disabilities”

* “The Status of the Selection of Gifted Students with Learning Disabilities

for Gifted Programs”

* Assessment of Children With Intellectual Giftedness and Reading

Disabilities”

* Specific Writing Disabilities in Intellectually Gifted Children”

Journal Articles on Risk and Resilience . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50 – 53

* “The Implications of the Risk and Resilience Literature for Gifted

Students With Learning Disabilities”

* “Implications of Risk and Resilience in the Life of the Individual Who is

Gifted/Learning Disabled” (appears in Learning Disabilities section also)

Literature Review Summary:

An Overview of the Literature Pertaining to Twice Exceptional Students

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