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**CAPE Action Research  
Gifted and Talented Project  
(AISI Cycle II)  
2003/2004-2005-2006**

The fundamental premise of CAPE's Individualized Program is that each student presents with a unique set of strengths and areas of concern, and therefore needs and deserves a tailored program that supports both strengths and weaknesses. This philosophy is entrenched in the CAPE charter: "students wish for, need, and deserve an individualized, flexible, and innovative program, which will lead to success in academic pursuits;"

Initially, this individualization took the form of the Language and/or mathematics Intensive Study Hall for identified students and general study hall for others, Extended or Enrichment Language for grades 1 through 3, vertical movement by the subject or the grade, in-class enrichment and remediation, additional teacher assistance at lunch and/or after school, and the Literacy Support Program. These various initiatives seem to be supporting some students' needs. However, the gifted group is still not engaging in intellectual explorations and continues to face issues such as the lack of organizational skills, study skills, process skills, social issues, and emotional stressors to mention only a few. The emotional, social, and academic needs of this group of gifted or talented individuals do not seem have been successfully addressed to date.

A program has been developed to address the emotional, social, and academic needs of this group of gifted or talented students. It's goal is to increase academic achievement particularly in language, mathematics, social studies, science, and technology as well as to increase social/personal skills such as group interaction, problem solving, self-direction, independence, and organization.

Identified gifted and talented grades 6-9 students were grouped in a cross grade class. They were offered a fully enriched, integrated, interactive program of studies in four core subjects involving group work, individual and/or group projects, and special projects. The English Language arts and social studies programs were integrated and team-taught. An extensive, extended reading list including Canadian, American, British, Russian, etc. authors enrich and challenge. Students have been exposed to various forms of literature and types of writings (scientific papers, research papers, position papers, plays, poetry, short stories, etc.). Science and mathematics were integrated. The integration allowed for the application of concepts within these areas. Students have had access to personal computers, internet, e-mail and other technologies, all integrated into every aspect of the program. Core time was dedicated to a cross-grade program during which students of different ages but similar abilities/areas of talent interact. Peer teaching and group work facilitated the development of social and personal skills. This was reinforced in project time in the p.m. during which students were immersed in a different social structure.

### Key Strategies:

1. More challenging material such as advanced novels & plays, world governments and organizations, pure and applied mathematics, development of scientific theories through experiments, investigation of scientific theories through history.
2. Integrated program - Math/Science and ELA/Social
3. Open-ended learning projects ( teacher generated activities which allow student choice while providing a basic framework, independent project developed by students)
4. Interactive classroom: multi-grade (6-9) classroom, multi-age (11-15) activities, small group activities.
5. Peer teaching
6. Team teaching
7. Technology integration: computer usage within all subjects, for all grades, for all types of assignments, power point presentations, research, Internet access, data management.
8. Community integration: guest speakers, field trips, on-site research, consultants.
9. Special/group projects: community outreach, school paper, newsletter.

Evaluative methods include standardized test, Achievement tests, and teacher generated marks. Feedback from parents, teachers and students also provides valuable insights into the rate of success of the program.

Over the three-year period, students have shown a significant degree of academic achievement and productivity that have not been reflected in the measures. The greatest indicators of this academic success are not the measures as stated but are:

- the year-end marks (53% in the Honours range),
- the year-end exam marks ( 61% in the Honours range),
- the number of students retained in the program until moving to a new school ( 95%),
- the very high percentile ranking on CCAT tests,
- the 79% PAT scores in the Excellence level,
- the very high grade level at which the students are working,
- the satisfaction of all stakeholders.

The students' gains in organizational and study skills were outstanding while social and emotional stability is an area that needs more work

One of the key findings is that an extremely small group of CAPE's gifted students are 'traditional' gifted students. These 'traditional' gifted students are bright with very even or flat WISC profiles, without major weak areas, are organized and disciplined, prepare for tests and do homework, pay attention in class and ask questions, are intrinsically motivated and eager to achieve. They test very well.

The profile of the vast majority of the students in this program shows a significant difference between the verbal and performance scores. Within the verbal, vocabulary scores are very high, information is as high or almost as high, comprehension is considerably lower. Performance scores are severely affected by very low processing speeds. This profile has come to affectionately be known as the 'CAPE Profile'. Our group of students is a very smart group, with much information and the words to talk about it all, but very little true understanding of that which they talk about. They think they know and understood, but in fact need to slow down, look at things more closely, and learn process skills, logical thinking skills, organization and accuracy, and divergent thinking skills. Emotional and behavioural issues such as depression, antisocial tendencies, and arrogant behaviours complicate the situation. These students are easily discouraged, are very critical of themselves, and have very poor social skills. As a result,

academic achievement is usually well below potential. They really are underachievers. The extreme scenario is, of course, that eventually these students may be dropping out of school.

Effective instructional practices include cross-grade and cross-disciplinary teaching, expanded curricula, the focus on organizational and study skills, the integrated projects, and the technology integration. Counseling and group work on problem solving, decision making and anger management supported well the development of social skills. The environment, structured so that students could find stimulation and support, could explore areas of interest, work with equally capable peers, and challenge each other as they so wished, supported their intellectual abilities and nurtured their desire for excellence. Student assessment practices that integrated standardized tests with teacher-generated tests, that also focused on methodology, organization, working to deadlines, critical thinking, self-direction, and more allowed for as complete a picture of the student knowledge, skills, and attitudes as possible. One of the most effective practices was the close communication with parents via the School Council, the web site, parent meetings, e-mail, and telephone. This facilitated the exchange of ideas, concerns, and suggestions between parents and teachers. Student issues as well as parental concerns were thus addressed immediately. Student progress was communicated in a timely and effective manner, yearly results were shared with all parents. Feedback was solicited and acted upon. The involvement of parents in the development of the project was crucial in gaining and retaining their support and involvement. This program and its effective practices have been retained and expanded upon over the years.

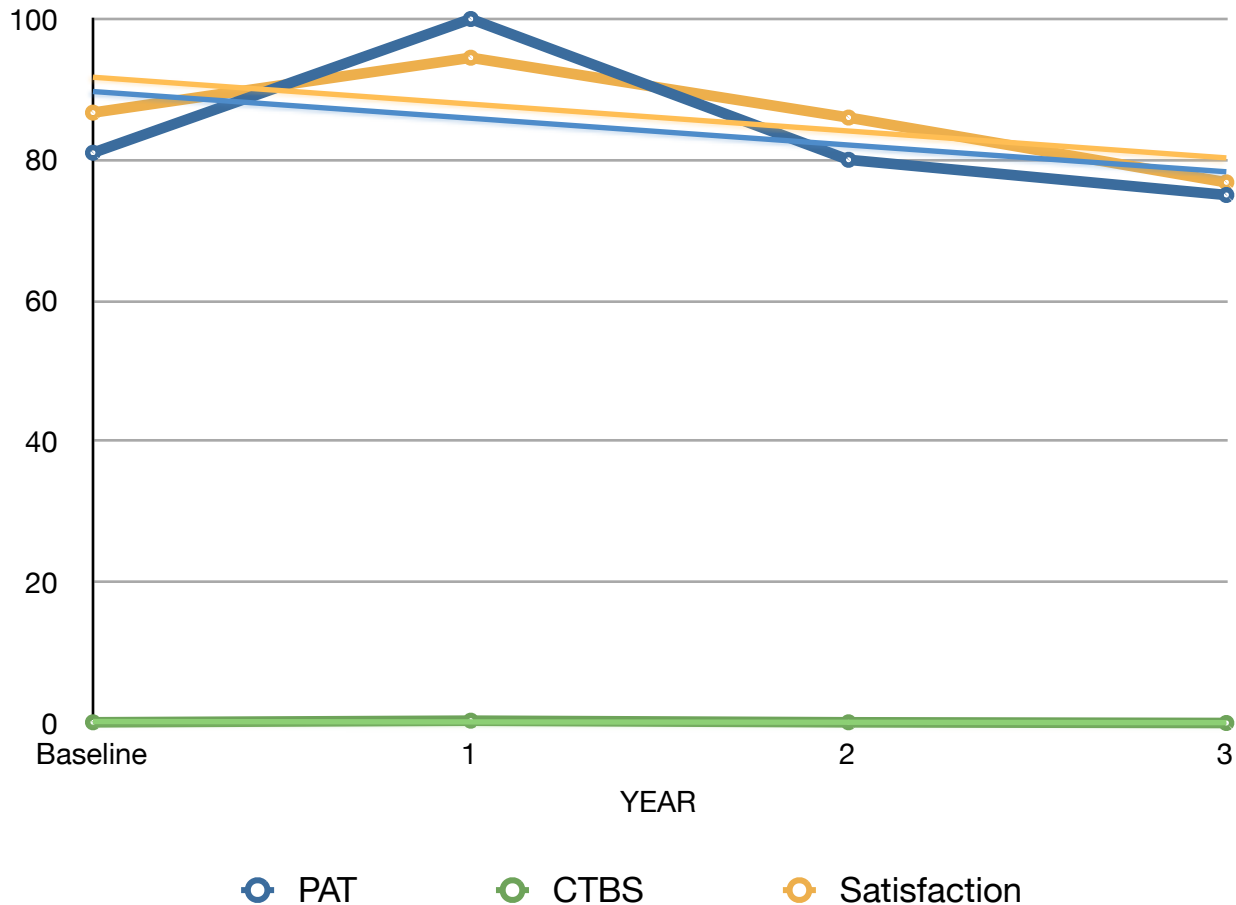
**Measures and data:**

Measure	Baseline	Year 1	Year 2	Year 3	Overall Change
Percentage of PAT language, math, social, & science scores from the gr. 6 & 9 gifted/talented students that fall within the Excellence range.	81	100	80	75	-6
The average increase over base level of 1.0 GE levels on CTBS language arts total, language total, mathematics total, science, sources total scores. CUM shown at right.	0.1	0.33	0.1	0.0	-0.1
The percentage of gifted/talented students, parents and teachers that are satisfied that the students have acquired and utilize stronger social and personal skills.	86.7	94.5	86	76.8	-9.9

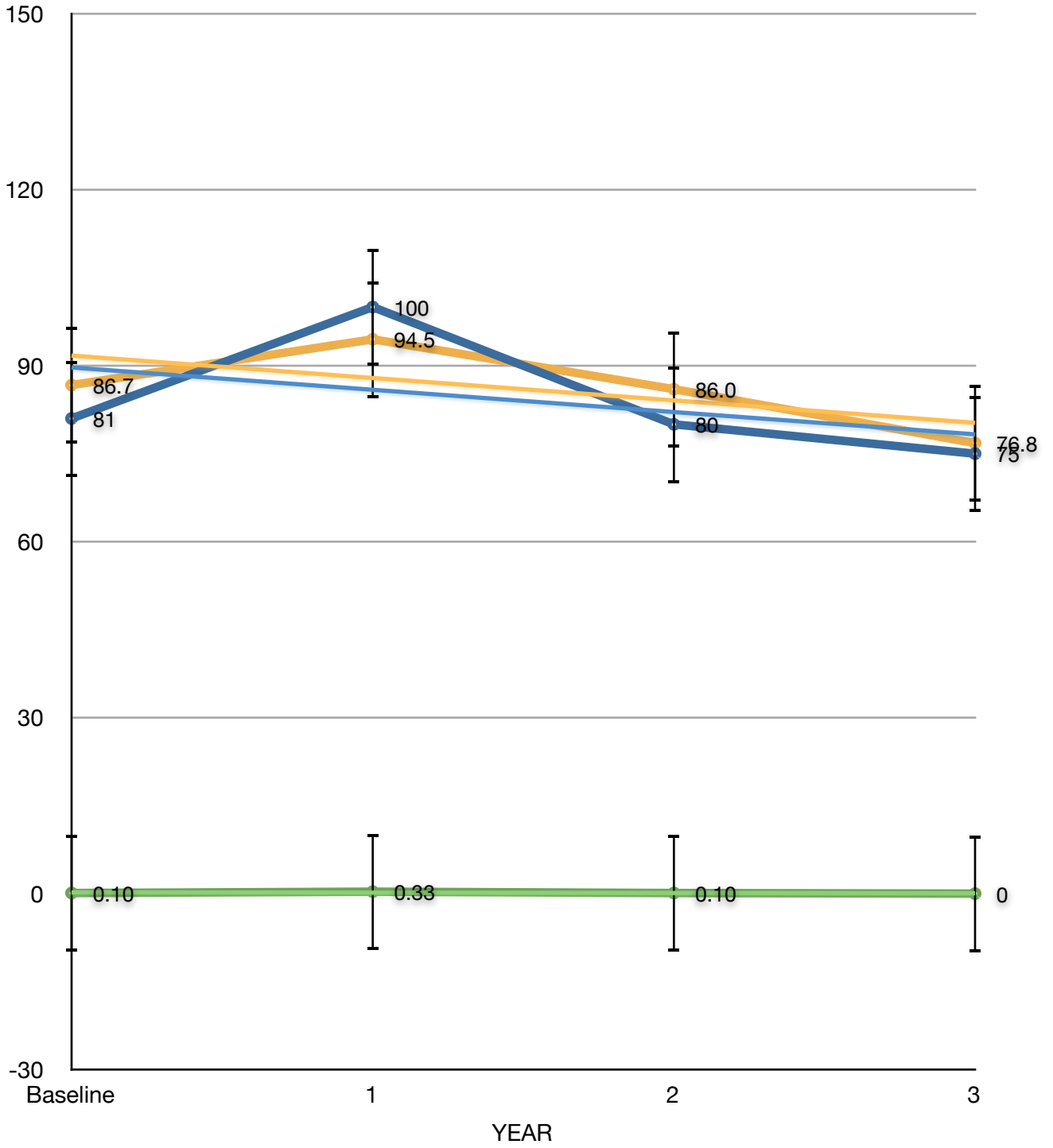
Note: The PAT baseline was derived from students' scores from the June 2003 language, math, social, and science scores, the satisfaction baseline are derived from the Satisfaction Entrance Surveys.

Note: As a standard, it is expected that students show an increase in the CTBS scores of 1.0 GE levels within one academic year. Since this is a group of gifted/talented students, it is expected that there be a greater increase in GE scores regardless of the fact that overall they are scoring well above grade level

**Gifted and Talented Project**



# Gifted and Talented Project



PAT

CTBS

Satisfaction

## **Bibliography:**

Berger, Sandra L. (1991). Differentiating curriculum for gifted students. *ERIC ED Digest* E510. Retrieved November 12, 2005, from [http://www.kidsource.com/kidsource/content/diff\\_curriculum.html](http://www.kidsource.com/kidsource/content/diff_curriculum.html)

Abstract: No matter where gifted and talented students obtain their education, they need an appropriately differentiated curriculum designed to address their individual characteristics, needs, abilities, and interests. A program that builds on these characteristics may be viewed as qualitatively (rather than quantitatively) different from the basic curriculum. This curriculum would result from appropriate modification of content, process, environment, and product expectation and student response. Curriculum effectiveness can be judged by examining mastery of basic skills, problem-finding and problem-solving activities, and connections within and across systems of knowledge. Seven guiding principles for curriculum differentiation are offered, covering such areas as productive thinking skills, self-directed learning, and in-depth study

Literature Synopsis. Understanding giftedness: generalizations from the research and resources for educators and parents. University of Calgary.

Abstract: This research summary presents an introduction to the literature on giftedness and gifted education. It presents a synopsis of research that attempts to define and understand the nature of giftedness. Also presented are resources and sources of information for AISI leaders, teachers and parents with specific reference to classroom applications.

Reis, Sally M. Renzulli, Joseph S. (1992) Using curriculum compacting to challenge the above-average. *Educational Leadership*, 50 (2), 51.

Abstract: Describes curriculum compacting, an easy-to-implement instructional technique to make appropriate adjustments for students in any curricular area and at any grade level. Providing equitably for broad differences in students' abilities, interests, and learning styles; Study at the University of Connecticut's National Research Center on the Gifted and Talented (NRC/GT); Three phases of curriculum compacting process; More.

Teaching students who are gifted and talented. (2002, Spring). *Effective Practices in Special Programs*, 3, 1.

Abstract: Shaping the Future for Students with Special Needs: A Review of Special Education in Alberta, Final Report provided government and other partners with recommendations about programming for students who are gifted and talented. There was a recognized need to develop more resources to assist in the identification of these students and development of special programs to meet their needs.

Tomlinson, Carol Ann. (1995). Gifted learners and the middle school: problem or promise? *ERIC Digest*, E535.

Abstract: This information digest provides an overview of some areas of agreement between the fields of gifted education and middle school education, some areas of tension, and some promising directions that could engage educators in mutual planning of appropriate services for all middle school students, including the gifted. Shared beliefs include the value of instruction that is theme based, is interdisciplinary, and fosters student self-direction and independence. Problems between gifted and middle-level education exist in the areas of excellence versus equity, emphasis on heterogeneity, use of labels, ambiguity about appropriate middle school curricula, use of cooperative learning as an instructional strategy, attention to affective needs of early adolescents, and general tension. For each problem area, promising directions are listed, such as emphasizing appropriately differentiated instruction in heterogeneous classrooms, emphasizing problem-based strategies rather than skill-focused strategies in cooperative learning activities, planning for both achievement and belonging for advanced learners, and acknowledging strengths and contributions of both practices. (Contains 18 references.) (DB)

Baum, S. (1990). *Gifted but learning disabled: A puzzling paradox*. Retrieved September 22, 2006 from <http://www.hoagiesgifted.org/eric/e479.html>

Abstract: How can a child learn and not learn at the same time? Why do some students apply little or no effort to school tasks while they commit considerable time and effort to demanding, creative activities outside of school? These behaviors are typical of some students who are simultaneously gifted and learning disabled. For many people, however, the terms learning disabilities and giftedness are at opposite ends of a learning continuum. In some states, because of funding regulations, a student may be identified and assisted with either learning disabilities or giftedness, but not both.

Baum, S. M., Cooper, C. R., & Neu, T. W. (2001). Duel differentiation: An approach for meeting The curricular needs of gifted students with learning disabilities [Electronic version]. *Psychology in School*, 38(5), 477–490.

Abstract: Gifted students who experience difficulty with reading, mathematics, spelling, handwriting, and organization frequently become frustrated at an early age. Well-intentioned teachers attempt to remediate their weaknesses; yet, these youngsters still feel alone in the classroom. Moreover, their academic limitations often mask enormous talent, which seldom has an opportunity to surface. Thus, gifted learning-disabled students require curriculum that develops their special talents and provides them strategies to compensate for problematic weaknesses. This article discusses the dual characteristics of gifted learning-disabled students and suggests a unique curriculum that integrates both through talent development. Developed through Project HIGH HOPES, funded federally by the Javits Act (1993-1996), this dually differentiated curriculum offers strategies for addressing students' learning problems while fulfilling their need for sophisticated challenge through advanced-level content and a focus on solving authentic, real-world problems.

Beckley, D. (1998, Spring). Gifted and learning disabled: Twice exceptional students. *National Research Center on the Gifted and Talented, Spring*. Retrieved October 10, 2006, from <http://www.gifted.uconn.edu/nrcgt/newsltr.html#Spring1998>

Abstract: This paper discusses the characteristics, identification, and curriculum needs of gifted students who also have learning disabilities. Three different subgroups of twice-exceptional students are described: (1) students who have been identified as gifted yet are exhibiting difficulties in school; (2) students identified as having learning disabilities but whose exceptional abilities have never been recognized or

addressed; and (3) students in general education classes who are considered unqualified for services provided for students who are gifted or who have learning disabilities. Because they assume that learning tasks will be easy for them and are not prepared for the difficulty that arises from activities in areas of their disabilities, twice-exceptional children frequently experience frustration, tension, and fear that eventually becomes defensiveness. Students often tend to be aggressive, careless, and frequently off-task. They also cause classroom disturbances and, similar to students with learning disabilities, seem deficient in tasks emphasizing memory and perceptual abilities. It is recommended that IQ and achievement tests be used to identify twice-exceptional students. In developing a curriculum, teachers are urged to individualize the learning tasks for all students so that students' gifts are developed along with compensatory methods to work around their disabilities.

Bray, M. A., Kehle, T. J., & Hintze, J. M. (1998). Profile analysis with the Wechsler test: Why does it persist? [Electronic version]. *School Psychologist International*, 19(3), 209–220.

Abstract: Despite the overwhelming evidence (e.g., R. A. Berk, 1982) that mitigates against the use of profile analysis, the practice of diagnosing specific cognitive or processing disabilities continues. The authors assert that the reason that profile analysis remains popular is probably because school psychologists are simply unfamiliar with the literature, and that they have a difficult time understanding the notion of g, along with its implications. Generally, the users of profile analysis assume that because the IQ tests, particularly the Wechsler Intelligence Scale for Children (WISC) scales, generate scores from subtests that differ in content, they must be measuring different types of cognitive abilities, and therefore the profile of these cognitive abilities should be diagnostically important. Finally, they find profile analysis more socially acceptable in that it implies the existence of multiple intelligences. The notion that a single IQ score captures all that is meaningful and practical about the IQ test is simply not acceptable, regardless of evidence to the contrary.

Brody, L. E., & Mills, C. J. (1997). Gifted children with learning disabilities: A review of the issues [Electronic version]. *Journal of Learning Disabilities*, 30(3), 282–296.

Abstract: Many people have difficulty comprehending that a child can be gifted and also have learning disabilities. As a result, children with special needs that result from both their high abilities and their learning problems are rarely identified and are often poorly served. This article explores the current policies and practices with regard to defining, identifying, and educating this population. Recommendations are included that would help ensure that students who are gifted and have learning disabilities receive the intervention needed to help them achieve their full potential.

Ferri, B. A., Gregg, N. & Heggoy, S. J. (1997). Profiles of college students demonstrating learning disabilities with and without giftedness [Electronic version]. *Journal of Learning Disabilities*, 30(5), 552–559.

Abstract: The purpose of this study was to analyze the assessment profiles of two groups of adults with learning disabilities. The first group comprised 48 adults (34 men and 14 women) demonstrating giftedness and a learning disability profile (G/LD). The second group of 46 adults (31 men and 15 women) demonstrated a learning disabled profile without giftedness (NG/LD). Both groups of participants were either attending or planning to attend college and sought testing at a university-affiliated learning disabilities center. Participants' mean age was 20 years, and all were White and from middle to upper-middle class backgrounds. Findings indicate that, as a group, the adults demonstrating a G/LD profile tended to be identified later and have more discrepancy among cognitive assessment profile scores than the NG/LD group. Cognitive subtest scores showed significant differences between the groups, but also several



areas of weakness evident in both groups regardless of the presence of giftedness. These findings emphasize the importance of identifying the presence of learning disabilities among gifted populations.

Grimm, J. (1998) The participation of gifted students with disabilities in gifted programs [Electronic version]. *Roeper Review*, 20 (4), 285–286.

Abstract: Gifted students with all types of disabilities are an often-overlooked segment of the gifted population. Before the 1970's, little mention was made of students who were both gifted and disabled. Until that time, most educators believed the two exceptionalities to be mutually exclusive.

McCoach, D. B., Kehle, T. J., Bray, M. A., & Siegle, D. (2001). Best practices in the identification of gifted students with learning disabilities [Electronic version]. *Psychology in the Schools*, 38(5), 403–411.

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

Reis, S. M., & McCoach, D. B. (2002). Underachievement in gifted and talented students with special needs [Electronic version]. *Exceptionality*, 10(2), 113–125.

Abstract: Talented students underachieve for many reasons and in many different circumstances. Unfortunately, there is no panacea for how to reverse underachievement in students whose talents are demonstrated in diverse ways. High-potential students with special needs are likely to experience underachievement as efforts to address their needs may focus more on remediation of difficulties and less on development of strength and talent. It is crucial for educators to differentiate between issues related to academic motivation and special needs related to students' disabilities that may be unrecognized by many classroom teachers. This article reviews research about twice-exceptional talented students who underachieve and provides general suggestions for interventions to address their academic talents and needs. Disabilities discussed include: hearing disabilities, cerebral palsy, learning disabilities, attention deficit hyperactivity disorder (ADHD), behavioural problems, psychological disorders, and over excitability.

Vaidya, S. R. (1993). Gifted children with learning disabilities: Theoretical implications and instructional challenge [Electronic version]. *Education*, 113(4), 568–573.

Abstract: This paper addresses a specific group of children: the gifted children with learning disabilities. The paper describes innovative strategies for identifying such children, instructional approaches to address their strengths and weaknesses, and theoretical implications.

Waldron, K. A., & Saphir, D. G. (1990). An analysis of WISC-R factors with gifted students

with learning disabilities [Electronic version]. *Journal of Learning Disabilities*, 23(8), 491-498.

**Abstract:** Intellectual patterns of gifted students with learning disabilities were studied to determine cognitive factors characterizing these children. Twenty-four gifted children with learning disabilities (LD) and a control group of non-disabled gifted children were administered the WISC-R. While differences between the two groups on individual subtests were examined, a comparison of broader factors was emphasized in discovering cognitive patterns that might suggest effective intervention.

Waldron, K. A., Saphire, D. G., & Rosenblum, S. A. (1987). Learning disabilities and giftedness: Identification based on self-concept, behaviour, and academic patterns [Electronic version]. *Journal of Learning Disabilities*, 20(7), 422-432.

**Abstract:** Examined the relationships among academic achievement, self-concept, and behaviour of the learning disabled/gifted child, and abilities of parents and teachers to identify the learning problem. 24 learning disabled/gifted children (aged 8-12 yrs) and 24 normally achieving, gifted controls were administered a 6-factor self-concept measure; their parents, regular classroom teachers, and teachers in an enrichment program completed a student behaviour measure. Analyses indicated tendencies for experimental Ss to have lower self-concepts than controls. Correlations showed 7 significant relationships between self-concept and hyperactive/asocial behaviours in experimental Ss. Enrichment program teachers, who had received special education training, significantly identified experimental Ss as having learning problems; no parents identified experimental children as having learning difficulties.