Research Based Strategies for Special Needs Students - Twice Exceptional Students

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In today’s inclusive classrooms, the most difficult exceptionality to identify is the student who is both gifted and learning disabled - students who are deemed twice exceptional. These students present unique challenges for educators with regards to identification and teaching. These are students who have outstanding gifts or talents and are capable of high performance, but who also have a disability that affects some aspect of learning (Brody & Mills, 1997). For example, a student with cerebral palsy can be a gifted mathematician.

Researchers have, however, established three categories that twice-exceptional students may fit into.

- Formally identified as gifted but not having an identified disability -- giftedness masks disability.
- Formally identified as having a disability but not gifted -- disability masks giftedness.
- Not formally identified as gifted or disabled -- components mask one another -- giftedness and the disability not readily apparent.

Although identifying these students can be challenging, experts have developed a list of characteristics that can be helpful in recognizing students who may be twice-exceptional.

- Struggle with basic skills due to cognitive processing difficulties; need to learn compensatory strategies in order to master basic skills.
- Show high verbal ability but extreme difficulty in written language area; may use language in inappropriate ways and at inappropriate times.
- Experience reading problems due to cognitive processing deficits.
- Demonstrate strong observation skills but have difficulty with memory skills.
- Excel in solving “real-world” problems; have outstanding critical thinking and decision-making skills; often independently develop compensatory skills.
- Show attention deficit problems but may concentrate for long periods in areas of interest.
- Have strong questioning attitudes; may appear disrespectful when questioning information, facts, etc. presented by teacher.
- Display unusual imagination; frequently generate original and at times rather “bizarre” ideas; extremely divergent in thought; may appear to daydream when generating ideas.
- May be unwilling to take risks with regard to academics; take risks in non-school areas without consideration of consequences.
- Can use humor to divert attention from school failure; may use humor to make fun of peers or to avoid trouble.
- Appears immature. They may use anger, crying, withdrawal, etc. to express feelings and to deal with difficulties.
- Require frequent teacher support and feedback in deficit areas; highly independent in other areas; can appear stubborn and inflexible.
- Sensitive regarding disability area(s); highly critical of self and others including teachers; can express concern about the feeling of others even while engaging in antisocial behavior.
- May not be accepted by other children and may feel isolated. May be perceived as loners since they do not fit typical model for either a gifted or a learning disabled student; sometimes have difficulty being accepted by peers due to poor social skills.
• Exhibit leadership ability. Is often a leader among the more nontraditional students demonstrating strong “street-wise” behavior; or the disability may interfere with the student’s ability to exercise leadership skills.
• Show a wide range of interests but may be thwarted in pursuing them due to processing or learning problems.
• Very focused interests, for example, a passion about certain topics to the exclusion of others, often not related to school subjects.

Once you’ve been able to identify a student who is gifted and has a disability, how can you possibly meet this child’s diverse needs in addition to the other students in the class? Again, experts have developed some effective practices that can help to reduce this challenge. According to Winebrenner (2003), teaching twice-exceptional students can be simple if the classroom teacher is aware of and teaches to the student’s strengths while providing direct instruction in the areas of need.

As educators we need to be creative and willing to experiment with a variety of teaching strategies to determine what works best for an individual student. Some proven teaching strategies from Hoagies’ Gifted Education Home Page include the following.

• Academic Problems
  o Present material in a variety of ways (visually, orally, and kinesthetically). Have written material taped by parents, other students, or community helpers.
  o Give students opportunities to share knowledge in different ways (tape reports, oral quizzes or tests, class demonstrations).
  o Provide alternative learning experiences which are not dependent on paper and pencil or reading (puzzles, logic games, tangrams, math manipulatives).
  o Place the child where the board and teacher can be easily seen.
  o Give realistic deadlines for completing assignments (often longer than for others).
  o Use contracts.

• Develop Compensatory Skills
  o Teach typing and computer literacy and encourage the use of calculators and tape recorders as aides.
  o Teach organizational and problem solving strategies using cognitive behavior modification techniques.

• Affective Needs
  o Reduce academic pressures as a way to lessen frustration and lack of motivation.
  o Use values clarification and role playing activities.
  o Use games such as UNGAME to encourage students to talk, and hold class meetings to discuss feelings and problems.
  o Bring successful gifted learning disabled adults into the classroom to serve as role models.
  o Explain what it is like to be gifted and learning disabled.
  o Work toward having the gifted learning disabled student learn to value her or himself as a strong, intelligent human being.

As with all students, twice-exceptional students are important to the future of our communities. Their unrealized potential can mean immeasurable societal costs. It is our responsibility as educators to make sure the potential of this group of students is not lost.
Below are some additional resources you may find of interest.

- ERIC - http://www.hoagiesgifted.org/eric/archived/e427.html

This series is based on a presentation by Charles A. Hughes, Ph.D. and Marisa A. Macy, Ph.D. of Penn State University, who find these to be research-based best practices. The findings of this study are under review and have not been released by the Institute of Education Sciences (IES). The information provided here is not endorsed by IES.