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Giftedness and Asperger's Syndrome: A New Agenda for Education

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The principal looked around the table in bewilderment, the file of 9-year-old Jason open in front of her. The math teacher has proclaimed this child a genius: he understands ideas that others won't get for years. No wonder he has trouble talking to the other kids...he's just way beyond them. The English teacher thinks it's something different-Jason seems bright in math, but in English he's nowhere. She's not always really sure he knows the meaning of all those words he uses-she's not sure he should have been grade skipped. You know if you went in the hall and asked Jason's classmates, they'd have a diagnosis: geek, dweeb. Jason's parents simply look confused. They've come here for help, but it seems like a futile effort. Now the special education teacher pipes up: Jason isn't gifted, he's got Asperger's Syndrome. What's the problem with this scenario? The gifted education teacher wasn't invited to the meeting...

Across the country, around the world, this scene is repeated. A relatively new category in the continuum of behavior disorders, Asperger's Syndrome (AS) is both compelling and alarming to educators in gifted education. What does it mean to be gifted with Asperger's? It's a question that gifted educators must learn to answer, to ensure proper programming for children who are gifted, children who are Asperger's, and children who are both.

What is Asperger's Syndrome?

Asperger's Syndrome is one of a number of pervasive developmental disorders, a group of disorders that includes autism. Early on Asperger's Syndrome was referred to as "high functioning autism." Now AS is recognized as a disorder separate from autism, although the primary difference between the two is level of mental functioning: while autistic children tend to also have lower than average measured intelligence, children with Asperger's Syndrome have average or above measured intelligence.

Characteristic Behaviors of Asperger's Syndrome

Asperger's Syndrome is primarily a disorder in social interactions. People with AS tend to be oblivious to social conventions (Attwood, 1998). They literally **don't know how** to share a conversation, to be "polite," or to seek friendship. The American Psychological Association (1994) divides the behaviors that indicate Asperger's Syndrome into four general categories:

- **impaired social functioning**, including inability to make friends, show empathy, read social cues or use social non-verbal communication (eye contact, posture, and gestures)
- **restricted and stereotyped behaviors or interests**, including a single intense area of interest, repetitive hand movement, sensory sensitivity, compulsive repetition
- **average or above average language development-**-vocabulary and usage are normal, although some hyperlexia (basically, sophisticated usage without sophisticated comprehension) may be present, especially in an area of intense interest

• **average or above average cognitive development**-standardized IQ measures anywhere from average to highly gifted

The first two categories describe the problem, the second two clearly associate AS with people who are otherwise of "normal" or above average ability. A growing misconception is addressed in this description, for it is not true that all AS children are gifted; rather, gifted children are included in the range of abilities where AS can be diagnosed.

Appreciating the Different Drummer

The math teacher bristles at the suggestion that Jason has a disorder: he's not sick, he's different, she insists. He sees the world in a different way. Socializing is hard because his thinking is so advanced. He's gifted-this doesn't require a cure!

Advocates for Asperger's/gifted (AG) children are eager to have them appreciated as wonderful, special children. The presence of dual exceptionality always casts a shadow over this goal. So much of Asperger's Syndrome echoes the behaviors of healthy highly gifted children that some of the first discussions of AS in the gifted community are cautions not to mistake giftedness for Asperger's Syndrome.

Differentiating between AG and AS is simplified by remembering that Asperger's Syndrome is a *spectrum disorder*--representative characteristics lay on a continuum. An AS diagnosis is only warranted when the behaviors 1) occur together and 2) are extreme. This fact is pivotal for parents and professionals involved with gifted children because it allows for differentiation between behaviors typical of gifted children and the extremes of Asperger's Syndrome. Table 1 presents a thumbnail sketch of a few critical distinctions between the behaviors of gifted children and Asperger's children of average IQ. The differences are often those of degree more than kind. To take one example, seeing Jason sitting in the corner and knowing that he's depressed because he has no friends in class is not enough to determine the presence or absence of AS. All AS children have social problems, but not all children with social problems are AS.

Facing the Equal but Opposite Challenge

Jason's English teacher sighs. She's only trying to help. Good vocabulary and good memorizing skills do not automatically mean giftedness. Jason is not functioning, and he won't without systematic intervention. Even if he is gifted, that doesn't make him immune to other problems. He needs special help.

Cautions against misdiagnosis are legitimate; however, there's an equal and opposite challenge-recognizing that although most gifted children do not have Asperger's Syndrome, some do. To that end, a group of parents have generously opened up their lives by responding to an extensive survey about their AG/AS children, their lives at school, and their lives at home. While this group is hardly a scientific sample, and provides *no definitive answers*, they do present valuable consistent insights that can be used as a springboard for dialogue, research, and ultimately services for AG/AS children. What follows are some of the most significant issues and ideas raised by the parents' descriptions of their AG/AS children and supported by separate research literature on AG and AS.

Gifted and Asperger's: First Signs and Identification Issues

For the most part, parents reported that giftedness was the first exceptionality identified, often in the form of advanced verbal skill, a trait shared by both AG and AS children, but more likely to be classified as gifted. Some parents indicated that identification of AS was delayed because attention was centered on giftedness. Failing to recognize the presence of AS, parents and teachers may focus only on the child's giftedness, thinking the child is simply "geeky." At other times, social interaction problems of AG/AS students may be attributed incorrectly to a diagnosis of a learning disability. Although the AS literature suggests that some girls are identified as AS, this group was typical because the children discussed were all boys. A couple of respondents made reference to a possible genetic link, even saying that the child's diagnosis led to a retrospective diagnosis for his father.

Despite any initial concerns about misdiagnosis, each parent who responded to the survey reported great relief when his child was identified AG/AS. Parents described their child's AS behaviors in detail and recounted extreme frustration with the contrast between extreme intelligence and social ineptitude. Most frequent in the list of AS qualities was poor social interaction, or a simple lack of attention to the social world:

This last week, one of his previous teachers stopped to talk to him while he was with the counselor. This teacher was wearing a hat with a big bat on it in the spirit of Halloween. After they were done talking, the counselor asked B to turn around and describe the teacher. All he could come up with was that she had brown hair. When directly asked if she had a hat on, he said, 'Ummm, no?' He simply does not observe people at all.

The biggest challenges have been his wild outburst where he seems to lose the ability to control his actions and words.

Rigid need for order and predictability. BIG problems with transitions. BIG problems with departures from routine.

Highly Gifted
Socially Isolated
Independent of Age Mates
Highly Focused Interest
Advanced, Sophisticated Vocabulary
Complex Cognition
Advanced Understanding

Table I: Distinctions in Behaviors of Highly Gifted and Asperger's Syndrome

Asperger's Syndrome

Socially Inept Unskilled with Age Mates Highly Focused Interest Hyperlexia Simple Cognition Advanced Memorization

The Combining and Colliding Characteristics of AS and AG

Gifted children possess a set of characteristics that separates them from typical developing children. So do children with AS. Put the two together and the characteristics combine and collide in complex ways.

A small number of gifted children suffer from social isolation-isolation that may be exacerbated by the presence of AS. Consider combining the social inattention, motor clumsiness, and high verbal skill of Asperger's Syndrome with such traits as independent thinking, constant questioning, and heightened emotional sensitivity (Gallagher & Gallagher, 1994). It is the perfect formula for a social pariah. One parent pointed out that the child's isolation is made more poignant when his gifted insight perceived, but could not comprehend, his isolation:

The more gifted and intelligent an AS child is, the more he is aware of his 'different-ness' and the social problems that accompany it. If he were merely gifted and didn't have the lack of social understanding, he could fit in with his peers while he excelled academically. This also presents challenges because the more aware he is of his differentness, the more depression he experiences.

Giftedness and AS don't always work together. Sometimes the characteristics of one syndrome simply take over. Gifted AS students may unintentionally engage in behaviors that provoke ridicule or teasing from others in part because they lack the perspective to see their actions as inappropriate (Williams, 1995; Neihart, 2000). Table 2 contains a summary of some ways in which AG characteristics may look different when combined with AS.

Occasionally, the characteristics of AG supersede the AS, especially in the cognitive domain. While parents mentioned pedantic speech and huge stored memory, they also discussed cognitive abilities and skills more advanced and flexible than the typical AS child. Conceptual reasoning, critical thinking, and strong abstract moral empathy were often cited as typically gifted characteristics.

School Services

Gifted AS students may require alternate interventions and strategies from normal gifted students or non-gifted AS students (Neihart, 2000). As Table 2 demonstrates, professionals speculate the AG/AS child is neither completely like an AS child, nor completely like an AG child. Contrasts in the perceptions of the disorder among parents, teachers, and AG/AS students themselves add to the dilemma. Parents and educators need to understand the nature of AG/AS in order to provide appropriate interventions.

Virtually all parents of public school children had an IEP or were in the planning process. The IEP provided parents and teachers with some direction and a common point of communication for Asperger's Syndrome. Giftedness was almost never included in the IEP, although some received gifted programming anyway. Ironically, the time that the students spent in gifted education settings was a powerful intervention for Asperger's; as such, it has a legitimate place on the IEP. "Keeping the child stimulated intellectually...," said one parent, "seems to improve the emotional state."

Classroom Interventions

The children represented in the surveys were equally likely to be enrolled in public or private schools, but none were homeschooled. Level of satisfaction with the school's response to either AG or AS varied and was dependent not on the structure of the school but the attitude of the school personnel.

Table 2: AG vs. AG/AS Characteristics

Characteristics	AG	AG/AS
Routines	Usually follow routines	Low tolerance for routine
Social Awareness	Know they are different, can reason why	Know they are different, poor awareness of why
Humor	Receives/gives humor	Cannot reciprocate humor; does not understand timing.
Motor Skills	Coordinated	Motor clumsiness
Insight	Keen insight	Social insight absent
Moral Sense	Empathy for others and for abstract whole	Empathy for abstract whole; difficulty with empathy for others
Social Interaction	Knows how to make friends friendships	Unaware of how to establish
Knowledge Base	Extensive knowledge base, both deep and complex	Extensive knowledge base, deep and sometimes complex

The only commonality shared by the "success stories" was that the intervention was highly individualized. Most of the children had a full-time assistant working with them for a majority of the school day. Most children were being schooled in the regular classroom, although a few also attended gifted pull-out programs. One student had applied for a self-contained school for the gifted prior to his dual AG/AS diagnosis but was rejected because of concern for his "social maturity."

Praise was highest and satisfaction greatest when the school actively engaged in the intervention process. In some cases teachers and administrators alike took the opportunity to receive training in Asperger's Syndrome, worked to create a total school treatment plan, helped identify aides, collaborated with parents, and otherwise demonstrated an individualized, child-centered approach. Parents indicated a need for services directed towards both AS and AG, separately and occasionally in combination. One parent described a successful environment:

They are firm with him about what they expect and require and don't let the AS excuse him from participating, but they are sensitive to his feelings and work with him to accommodate his unique personality. At the beginning of each school year we sit down with his new teacher and talk about strategies which, although not complicated, make a world of difference for him. This includes

things such as making sure his desk is near where the teacher spends most of the time talking so he can stay focused, allowing him to take time-out from PE class when his tactile defensiveness causes him to act wildly, and keeping involved and aware of his social interactions.

Other parents had enlisted the help of occupational therapists and counselors. An interesting note: While social skills training was deemed essential, therapy based on role play was unsuccessful. Role play requires social understanding; AG/AS children needed direct training in social skills because they had no initial knowledge of social rules.

Gifted resource or consultant teachers may also find unique challenges with the AG/AS child. The learning environment that is a part of basic training in gifted education-open, complex, free-will not support and nurture the AG/AS child. Rather, the AG/AS child requires structure, normalcy, focus, and freedom from distraction. Finding ways to adapt to the presence of an AG/AS child will require consulting with the special education teacher to find the optimal adaptation that suits both the intellectual and the social and structural needs of the child.

Helpful Guidelines

The parents' comments echo the recommendations of the professional community. The National Research Council recently impaneled a Committee on Educational Interventions for Children with Autism. This group study included a number of pervasive developmental disorders under their charge, including Asperger's Syndrome. After reviewing the available research, they recommended the following for all children with autism or related syndromes:

Taking into account the needs and strengths of an individualized child and family, the child's schedule and educational environment, in and out of the classroom, should be adapted as needed in order to implement the IEP. Educational services should include a minimum of 25 hours a week, 12 months a year, in which the child is engaged in systematically planned, developmentally appropriate educational activity aimed toward identified objectives. Where this activity takes place and the content of the activity should be determined on an individual basis, depending on characteristics of both the child and the family (National Research Council, 2000, p. 220).

Other parents of AG/AS children may find these recommendations helpful in their efforts to establish services in their school districts.

A Call to Action for Gifted Educators

Suddenly, the principal jumps out of her chair and leaves the room. She is halfway down the hall when she runs into the person she is seeking going the other way. 'You need to be in this meeting.'

'I'd like to share my perspective on Jason,' they say simultaneously. Quickly they get back to the meeting room and proceed with the discussion.

Gifted educators have valuable information to bring to the AG/AS discussion. There's new perspective on giftedness to learn about, too. Gifted professionals can contribute to the proper placement of all children by

- 1. becoming familiar with the characteristics and behaviors associated with Asperger's Syndrome. Attend or request in-service on the topic in your district
- 2. sharing information on the characteristics of the highly gifted child with regular classroom teachers, school administrators, school psychologists, and other diagnosing clinics
- 3. requesting permission to be present at IEP meetings for Asperger's students who are also diagnosed as gifted
- 4. ensuring that AG services are included in the discussion as a treatment option for AS

Final Words

Jason is in the hands of caring, and increasingly knowledgeable, professionals. Does his ultimate diagnosis matter to us right now? No. What's important is that we all acknowledge the ambiguity that is ever present in cases like Jason's and to remember that, depending on the observed characteristics, any of the possible diagnoses--AS, AG, or AS/AG--may be correct. Also important is the reminder parents sent, loud and clear, that while the AG/AS child presents many difficult challenges, sleepless nights, and conflicts, he is also a child full of potential. Just ask them, "What do you see in your child that you would like others to see?"

I see potential for a happy, successful life-just like every other parent sees in their child. That's all I want others to see in him.

[I want to make] sure that the problems don't smother the beauty in such a child.

His wonderful sense of humor about the world and life; his sweetness and good heart; his unique perception; his willingness to take responsibility for his actions, no matter the consequences.

Web Sites of Interest:.

Asperger Syndrome Coalition of the U.S www.asperger.org/index_asc.html Asperger Internet Support Network djensen.ourfamily.com/asisn/network.html Asperger Syndrome Education Network www.aspennj.org aspie.freeservers.com/main.html GT World www.gtworld.org National Research Council report on autism www.nap.edu/catalog/10017.html

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Williams, K. (1995). Understanding the Student with Asperger Syndrome: Guidelines for Teachers. *Focus on Autistic Behavior*, *10*(2), 9-17.

Table 3: Diagnostic Criteria For Asperger's Disorder

- A. Qualitative impairments in social interaction, as manifested by at least two of the following:
 - 1. Marked impairment in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial
 - 2. expression, body postures, and gestures to regulate social interaction
 - 3. Failure to develop peer relationships appropriate to developmental level
 - 4. A lack of spontaneous seeking to share enjoyment, interests, or achievements with other
 - 5. people e.g., by a lack of showing, bringing, or pointing out objects of interest to other people.
 - 6. Lack of social or emotional reciprocity
- B. Restricted repetitive and stereotyped patterns of behavior, interests, and activities, as manifested by at least one of the following:
 - 1. encompassing preoccupation with one or more stereotyped and restricted patterns of interest,
 - 2. abnormal either in intensity or focus
 - 3. apparently inflexible adherence to specific, nonfunctional routines or rituals
 - 4. stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting, or
 - 5. complex whole-body movements)
 - 6. persistent preoccupation with parts of objects
- C. The disturbance causes no clinically significant general delay in language (e.g., single words used by age 2, communicative phrases used by age 3).
- D. There is no clinically significant delay in cognitive development or in the development of age-appropriate self-help skills, adaptive behavior (other than in social interaction), and curiosity about the environment in childhood.
- E. Criteria are not met for another specific Pervasive Developmental Disorder or Schizophrenia. (American Psychological Association, 1994, p.77).

Changes in Differentiation for Students with AG/AS

- 1. Establish orderly classroom routine for the child.
- 2. Build perception-taking skill through social training
- 3. Teach listening skills.
- 4. Focus on written irony in comics and humorous written works
- 5. Teach keyboarding
- 6. Teach social skills, and provide opportunities for safe practice of these skills

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