

AUTISTIC BEHAVIOR

Understanding the Student with Asperger Syndrome: Guidelines for Teachers

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Children diagnosed with Asperger syndrome present a special challenge in the educational milieu. This article provides teachers with descriptions of seven defining characteristics of Asperger syndrome, in addition to suggestions and strategies for addressing these symptoms in the classroom. Behavioral and academic interventions based on the author's teaching experiences with children with Asperger syndrome are offered.

Children diagnosed with Asperger syndrome (AS; see Note) present a special challenge in the educational milieu. Typically viewed as eccentric and peculiar by classmates, their inept social skills often cause them to be made victims of scapegoating. Clumsiness and an obsessive interest in obscure subjects add to their "odd" presentation. Children with AS lack understanding of human relationships and the rules of social convention; they are naive and conspicuously lacking in common sense. Their inflexibility and inability to cope with change causes these individuals to be easily stressed and emotionally vulnerable. At the same time, children with AS (the majority of whom are boys) are often of average to above-average intelligence and have superior rote memories. Their single-minded pursuit of their interests can lead to great achievements later in life.

Asperger syndrome is considered a disorder at the higher end of the autistic continuum. Comparing individuals within this continuum, Van Krevelen (cited in Wing, 1991) noted that the low-functioning child with autism "lives in a world of his own," whereas the higher functioning child with autism "lives in our world but in his own way" (p. 99).

Naturally, not all children with AS are alike. Just as each child with AS has his or her own unique personality, "typical" AS symptoms are manifested in ways specific to each individual. As a result, there is no exact recipe for classroom approaches that can be provided for every youngster with AS, just as no one educational method fits the needs of all children not afflicted with AS.

Following are descriptions of seven defining characteristics of Asperger syndrome, followed by suggestions and classroom strategies for addressing these symptoms. (Classroom interventions are illustrated with examples from my own teaching experiences at the University of Michigan Medical Center Child and Adolescent Psychiatric Hospital School.) These suggestions are offered only in the broadest sense and should be tailored to the unique needs of the individual student with AS.

Insistence on Sameness

Children with AS are easily overwhelmed by minimal change, are highly sensitive to environmental stressors, and sometimes engage in rituals. They are anxious and tend to worry obsessively when they do not know what to expect; stress, fatigue, and sensory overload easily throw them off balance.

Programming Suggestions

- Provide a predictable and safe environment;
- Minimize transitions;
- Offer consistent daily routine: The child with AS must understand each day's routine and know what to expect in order to be able to concentrate on the task at hand;
- Avoid surprises: Prepare the child thoroughly and in advance for special activities, altered schedules, or *any* other change in routine, regardless of how minimal;

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- Allay fears of the unknown by exposing the child to the new activity, teacher, class, school, camp, and so forth beforehand, and as soon as possible after he or she is informed of the change, to prevent obsessive worrying. (For instance, when the child with AS must change schools, he or she should meet the new teacher, tour the new school, and be apprised of his or her routine in advance of actual attendance. School assignments from the old school might be provided the first few days so that the routine is familiar to the child in the new environment. The receiving teacher might find out the child's special areas of interest and have related books or activities available on the child's first day.)

Impairment in Social Interaction

Children with AS show an inability to understand complex rules of social interaction; are naive; are extremely egocentric; may not like physical contact; talk *at* people instead of to them; do not understand jokes, irony, or metaphors; use monotone or stilted, unnatural tone of voice; use inappropriate gaze and body language; are insensitive and lack tact; misinterpret social cues; cannot judge "social distance"; exhibit poor ability to initiate and sustain conversation; have well-developed speech but poor communication; are sometimes labeled "little professor" because speaking style is so adult-like and pedantic; are easily taken advantage of (do not perceive that others sometimes lie or trick them); and usually have a desire to be part of the social world.

Programming Suggestions

- Protect the child from bullying and teasing;
- In the higher age groups, attempt to educate peers about the child with AS when social ineptness is severe by describing his or her social problems as a true disability. Praise classmates when they treat him or her with compassion. This tack may prevent scapegoating, while promoting empathy and tolerance in the other children;
- Emphasize the proficient academic skills of the child with AS by creating cooperative learning situations in which his or her reading skills, vocabulary, memory, and so forth will be viewed as an asset by peers, thereby engendering acceptance.
- Most children with AS want friends but simply do not know how to interact. They should be *taught* how to react to social cues and be given repertoires of responses to use in various social situations. Teach the children what to say and how to say it. Model two-way interactions and let them role-play. These children's social judgment improves only after they have been taught rules that others pick up intuitively. One adult with AS noted that he had learned to "ape human behavior." A college professor with AS remarked that her quest to understand human interactions made her "feel like an anthropologist from Mars" (Sacks, 1993, p. 112);
- Although they lack personal understanding of the emotions of others, children with AS can *learn* the correct way to respond. When they have been unintentionally insulting, tactless, or insensitive, it must be explained to them why the response was inappropriate and what response would have been correct. Individuals with AS must learn social skills intellectually: They lack social instinct and intuition;
- Older students with AS might benefit from a "buddy system." The teacher

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can educate a sensitive nondisabled classmate about the situation of the child with AS and seat them next to each other. The classmate could look out for the child with AS on the bus, during recess, in the hallways, and so forth, and attempt to include him or her in school activities.

- Children with AS tend to be reclusive; thus the teacher must foster involvement with others. Encourage active socialization and limit time spent in isolated pursuit of interests. For instance, a teacher's aide seated at the lunch table could actively encourage the child with AS to participate in the conversation of his or her peers not only by soliciting his or her opinions and asking him questions, but also by subtly reinforcing other children who do the same.

Restricted Range of Interests

Children with AS have eccentric preoccupations or odd, intense fixations (sometimes obsessively collecting unusual things). They tend to relentlessly "lecture" on areas of interest; ask repetitive questions about interests; have trouble letting go of ideas; follow own inclinations regardless of external demands; and sometimes refuse to learn about anything outside their limited field of interest.

Programming Suggestions

- Do not allow the child with AS to perseveratively discuss or ask questions about isolated interests. Limit this behavior by designating a specific time during the day when the child can talk about this. For example: A child with AS who was fixated on animals and had innumerable questions about a class pet turtle knew that he was allowed to ask these questions only during recesses. This was part of his daily routine, and he quickly learned to stop himself when he began asking these kinds of questions at other times of the day;
- Use of positive reinforcement selectively directed to shape a desired behavior is the critical strategy for helping the child with AS (Dewey, 1991). These children respond to compliments (e.g., in the case of a relentless question-asker, the teacher might consistently praise him as soon as he pauses and congratulate him for allowing others to speak). These children should also be praised for simple, expected social behavior that is taken for granted in other children;
- Some children with AS will not want to do assignments outside their area of interest. *Firm expectations* must be set for completion of classwork. It must be made very clear to the child with AS that he is not in control and that he must follow specific rules. At the same time, however, meet the children halfway by giving them opportunities to pursue their own interests;
- For particularly recalcitrant children, it may be necessary to initially individualize all assignments around their interest area (e.g., if the interest is dinosaurs, then offer grammar sentences, math word problems, and reading and spelling tasks about dinosaurs). Gradually introduce other topics into assignments;
- Students can be given assignments that link their interest to the subject being studied. For example, during a social studies unit about a specific country, a child obsessed with trains might be assigned to research the modes of transportation used by people in that country;
- Use the child's fixation as a way to broaden his or her repertoire of interests.

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For instance, during a unit on rain forests, the student with AS who was obsessed with animals was led to not only study rain forest animals but to also study the forest itself, as this was the animals' home. He was then motivated to learn about the local people who were forced to chop down the animals' forest habitat in order to survive.

Poor Concentration

Children with AS are often off task, distracted by internal stimuli; are very disorganized; have difficulty sustaining focus on classroom activities (often it is not that the attention is poor but, rather, that the focus is "odd"; the individual with AS cannot figure out what is relevant [Happé, 1991], so attention is focused on irrelevant stimuli); tend to withdraw into complex inner worlds in a manner much more intense than is typical of daydreaming; and have difficulty learning in a group situation.

Programming Suggestions

- A tremendous amount of regimented external structure must be provided if the child with AS is to be productive in the classroom. Assignments should be broken down into small units, and frequent teacher feedback and redirection should be offered;
- Children with severe concentration problems benefit from *timed* work sessions. This helps them organize themselves. Classwork that is not completed within the time limit (or that is done carelessly) within the time limit must be made up during the child's own time (i.e., during recess or during the time used for pursuit of special interests). Children with AS can sometimes be stubborn; they need firm expectations and a structured program that teaches them that compliance with the rules leads to positive reinforcement (this kind of program motivates the child with AS to be productive, thus enhancing self-esteem and lowering stress levels, because the child sees himself as competent);
- In the case of mainstreamed students with AS, poor concentration, slow clerical speed, and severe disorganization may make it necessary to lessen his or her homework/classwork load and/or provide time in a resource room where a special education teacher can provide the additional structure the child needs to complete classwork *and* homework (some children with AS are so unable to concentrate that it places undue stress on parents to expect that they spend hours each night trying to get through homework with their child);
- Seat the child with AS at the front of the class and direct frequent questions to him or her to help him or her attend to the lesson;
- Work out a nonverbal signal with the child (e.g., a gentle pat on the shoulder) for times when he or she is not attending;
- If a buddy system is used, sit the child's buddy next to him or her so the buddy can remind the child with AS to return to task or listen to the lesson;
- The teacher must actively encourage the child with AS to leave his or her inner thoughts/fantasies behind and refocus on the real world. This is a constant battle, as the comfort of that inner world is believed to be much more attractive than anything in real life. For young children, even free play needs to be structured, because they can become so immersed in solitary, ritualized fantasy play that they lose touch with reality. Encouraging a

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child with AS to play a board game with one or two others under close supervision not only structures play but offers an opportunity to practice social skills.

Poor Motor Coordination

Children with AS are physically clumsy and awkward; have stiff, awkward gaits; are unsuccessful in games involving motor skills; and experience fine-motor deficits that can cause penmanship problems, slow clerical speed, and affect their ability to draw.

Programming Suggestions

- Refer the child with AS for an adaptive physical education program if gross-motor problems are severe;
- Involve the child with AS in a health/fitness curriculum in physical education, rather than in a competitive sports program;
- Do not push the child to participate in competitive sports, as his or her poor motor coordination may only invite frustration and the teasing of team members. The child with AS lacks the social understanding of coordinating one's own actions with those of others on a team;
- Children with AS may require a highly individualized cursive program that entails tracing and copying on paper, coupled with motor patterning on the blackboard. The teacher guides the child's hand repeatedly through the formation of letters and letter connections and also uses a verbal script. Once the child commits the script to memory, he or she can talk himself or herself through letter formations independently;
- Younger children with AS benefit from guidelines drawn on paper that help them control the size and uniformity of letters they write. This also forces them to take the time to write carefully;
- When assigning timed units of work, make sure the child's slower writing speed is taken into account.
- Individuals with AS may need more time than their peers to complete exams (taking exams in the resource room not only offer more time but would also provide the added structure and teacher redirection these children need to focus on the task at hand).

Academic Difficulties

Children with AS usually have average to above-average intelligence (especially in the verbal sphere) but lack higher level thinking and comprehension skills. They tend to be very literal: Their images are concrete, and abstraction is poor. Their pedantic speaking style and impressive vocabularies give the false impression that they understand what they are talking about, when in reality they are merely parroting what they have heard or read. The child with AS frequently has an excellent rote memory, but it is mechanical in nature; that is, the child may respond like a video that plays in set sequence. Problem-solving skills are poor.

Programming Suggestions

- Provide a highly individualized academic program engineered to offer consistent successes. The child with AS needs great motivation to *not* follow

his or her own impulses. Learning must be rewarding and not anxiety-provoking;

- Do not assume that children with AS understand something just because they parrot back what they have heard;
- Offer added explanation and try to simplify when lesson concepts are abstract;
- Capitalize on these individuals' exceptional memory: Retaining factual information is frequently their forte;
- Emotional nuances, multiple levels of meaning, and relationship issues as presented in novels will often not be understood;
- The writing assignments of individuals with AS are often repetitious, flit from one subject to the next, and contain incorrect word connotations. These children frequently do not know the difference between general knowledge and personal ideas and therefore assume the teacher will understand their sometimes abstruse expressions;
- Children with AS often have excellent reading recognition skills, but language comprehension is weak. Do not assume they understand what they so fluently read;
- Academic work may be of poor quality because the child with AS is not motivated to exert effort in areas in which he or she is not interested. Very firm expectations must be set for the *quality* of work produced. Work executed within timed periods must be not only complete but done carefully. The child with AS should be expected to correct poorly executed classwork during recess or during the time he or she usually pursues his or her own interests.

Emotional Vulnerability

Children with Asperger syndrome have the intelligence to compete in regular education but they often do not have the emotional resources to cope with the demands of the classroom. These children are easily stressed due to their inflexibility. Self-esteem is low, and they are often very self-critical and unable to tolerate making mistakes. Individuals with AS, especially adolescents, may be prone to depression (a high percentage of depression in adults with AS has been documented). Rage reactions/temper outbursts are common in response to stress/frustration. Children with AS rarely seem relaxed and are easily overwhelmed when things are not as their rigid views dictate they should be. Interacting with people and coping with the ordinary demands of everyday life take continual Herculean effort.

Programming Suggestions

- Prevent outbursts by offering a high level of consistency. Prepare these children for changes in daily routine, to lower stress (see "Resistance to Change" section). Children with AS frequently become fearful, angry, and upset in the face of forced or unexpected changes;
- Teach the child how to cope when stress overwhelms him or her, to prevent outbursts. Help the child write a list of very concrete steps that can be followed when he or she becomes upset (e.g., 1--Breathe deeply three times; 2--Count the fingers on your right hand slowly three times; 3--Ask to see the special education teacher, etc.). Include a ritualized behavior that the child finds comforting on the list. Write these steps on a card that is placed

- in the child's pocket so that they are always readily available;
- Affect as reflected in the teacher's voice should be kept to a minimum. Be calm, predictable, and matter-of-fact in interactions with the child with AS, while clearly indicating compassion and patience. Hans Asperger (1991), the psychiatrist for whom this syndrome is named, remarked that "the teacher who does not understand that it is necessary to teach children [with AS] seemingly obvious things will feel impatient and irritated" (p. 57);
 - Do not expect the child with AS to acknowledge that he or she is sad/depressed. In the same way that they cannot perceive the feelings of others, these children can also be unaware of their own feelings. They often cover up their depression and deny its symptoms;
 - Teachers must be alert to changes in behavior that may indicate depression, such as even greater levels of disorganization, inattentiveness, and isolation; decreased stress threshold; chronic fatigue; crying; suicidal remarks; and so on. Do not accept the child's assessment in these cases that he or she is "OK";
 - Report symptoms to the child's therapist or make a mental health referral so that the child can be evaluated for depression and receive treatment if this is needed. Because these children are often unable to assess their own emotions and cannot seek comfort from others, it is critical that depression be diagnosed quickly;
 - Be aware that adolescents with AS are especially prone to depression. Social skills are highly valued in adolescence, and the student with AS realizes he or she is different and has difficulty forming normal relationships. Academic work often becomes more abstract, and the adolescent with AS finds assignments more difficult and complex. In one case, teachers noted that an adolescent with AS was no longer crying over math assignments and therefore believed he was coping much better. In reality, his subsequent decreased organization and productivity in math was believed to be a function of his escaping further into his inner world to avoid the math, and thus he was not coping well at all;
 - It is critical that adolescents with AS who are mainstreamed have an identified support staff member with whom they can check in at least once daily. This person can assess how well he or she is coping by meeting with him or her daily and gathering observations from other teachers;
 - Children with AS must receive academic assistance as soon as difficulties in a particular area are noted. These children are quickly overwhelmed and react much more severely to failure than do other children.
 - Children with AS who are very fragile emotionally may need placement in a highly structured special education classroom that can offer an individualized academic program. These children require a learning environment in which they see themselves as competent and productive. Accordingly, keeping them in the mainstream, where they cannot grasp concepts or complete assignments, serves only to lower their self-concept, increase their withdrawal, and set the stage for a depressive disorder. (In some situations, a personal aide can be assigned to the child with AS rather than special education placement. The aide offers affective support, structure, and consistent feedback.)

Children with Asperger syndrome are so easily overwhelmed by environmental stressors, and have such profound impairment in the ability to form interpersonal relationships, that it is no wonder they give the impression of "fragile

vulnerability and a pathetic childishness" (Wing, 1981, p. 117). Everard (1976) wrote that when these youngsters are compared with their nondisabled peers, "one is instantly aware of how different they are and the enormous effort they have to make to live in a world where no concessions are made and where they are expected to conform" (p. 2).

Teachers can play a vital role in helping children with AS learn to negotiate the world around them. Because children with AS are frequently unable to express their fears and anxieties, it is up to significant adults to make it worthwhile for them to leave their safe inner fantasy lives for the uncertainties of the external world. Professionals who work with these youngsters in schools must provide the external structure, organization, and stability that they lack. Using creative teaching strategies with individuals suffering from Asperger syndrome is critical, not only to facilitate academic success, but also to help them feel less alienated from other human beings and less overwhelmed by the ordinary demands of everyday life.

Note

See the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; p. 77) for diagnostic criteria.

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