Beyond Behavior

Asperger Syndrome and Six Strategies for Success

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Imagine a world in which situations and events are unpredictable, social interactions and relationships are obscure and complex, and everyday life seems confusing and unforgiving. For many students with Asperger Syndrome (AS), this is the reality . . . this is AS. They struggle on a daily basis with things that most of us take for granted: going to school, making friends, and carrying out everyday tasks and activities. To further complicate the challenges they face, persons with AS are all too often overlooked, undiagnosed, and misunderstood.

What Is Asperger Syndrome?

Asperger Syndrome is a developmental disability marked by impairments in verbal and non-verbal communication, socialization, and behavior. Recognized by Hans Asperger in 1944, this pervasive developmental disability was not acknowledged by the American Psychiatric Association (APA) until 50 years later, in 1994. AS is considered by many to be a higher-functioning, milder form of autism. According to the *International Classification of Diseases and Related Health Problems* (World Health Organization, 1992) and *Diagnostic and Statistical Manual – 4th Edition, Text Revision* (APA, 1994), to receive a diagnosis of AS, an individual must exhibit some atypical form of repetitive patterns of behavior, interest, and activities that may include: (a) an encompassing special interest, (b) an inflexible adherence to a nonfunctional routine or ritual, (c) repetitive motor movements, or (d) a persistent preoccupation with parts of objects. AS involves impairments in socialization, communication, cognition, and sensation, resulting in considerable and long-term behavior problems.

Socialization

Socialization impairments are one of the hallmark traits of AS. In fact, these deficits may be one of the greatest disabling factors for students with this exceptionality (Barnhill, 2001; Krasny, Williams, Provencal, & Ozonoff, 2003). Social skills deficits that cannot be explained by other factors, such as shyness, short attention span, aggressive behavior, or lack of experience, isolate the student with AS. Building and maintaining social relationships and friendships can be problematic due to the student's lack of understanding of social cues, concrete interpretation of other's words, and language comprehension problems. Individuals with AS typically exhibit a social interaction style that is clumsy and one-sided, marked by abnormal inflection and contextually inappropriate words and phrases (Williams, 2001). When conversing with an individual with AS, one often gets the impression of being talked at as merely an object that requires information. The information shared by the individual with AS is usually a topic that is fascinating to him regardless of your input or interest. Another problem for students with AS is their inclination toward socially unaccepted and nonreciprocal responses. They often have a tendency to "blurt out" exactly what comes to mind, which can make students with AS seem rude and insensitive. Utterances such as "those pants make you look fat" or "it smells in here" are examples of the student merely stating an observation in an extremely honest and indiscreet manner (Attwood, 2003). Students with AS are also poor incidental learners. They often learn social skills without fully understanding their meaning and context (Myles & Southwick, 1999; Williams, 2001). In an attempt to gain structure, they typically apply rigid and broad universal social rules to all situations and eventualities. This is an unfortunate and all too often unsuccessful strategy that causes many problems for the student with AS. For example, most adolescents curse. However, most adolescents do not have to be taught that cursing in front of an adult may get them into trouble. Max, who has AS, hears other students at his school using some colorful curse words. He observes them cursing in the hallways, during lunch, and before school. He also notices that these curse words often provoke a response of laughter from peers. However, Max has *not* learned that adolescents shouldn't curse within earshot of a school administrator or teacher. Much to his surprise, Max is punished for his unacceptable cursing behavior when he uses the same amusing language while standing near a teacher. He had mistakenly perceived cursing to be socially acceptable. Such social nuances are an aspect of socialization that normally does not have to be taught, but, for most students with AS, these nuances are a "hidden curriculum," things they do not understand and therefore *must* be taught (Myles, Trautman, & Schelvan, 2004).

Every classroom, school, and society has a hidden curriculum. The hidden curriculum includes skills, actions, modes of dress, and so on (Myles & Simpson, 2001; Myles et al., 2004). In a school environment this knowledge could include (a) teacher expectations, (b) teacher-pleasing

behaviors, (c) which peers to interact with and which to stay away from, and (d) behaviors that attract both positive and negative attention (Myles & Simpson, 2001). This unwritten, unspoken curriculum can create many challenges and miserable situations for the individual with AS. It can, at the very least, cause students to be ridiculed by their peers and prevent them from building and maintaining friendships. Understanding the hidden curriculum can make all the difference. While social skills are somewhat rule-governed, these rules of socialization differ across settings, situations, people, age, and culture. Therefore, it is impossible for an individual to learn one set of knowledge and skills that could be generalized across a multitude of social situations. This complicates and increases the social learning needs of students with AS.

Communication

Communication impairments for individuals with AS include both verbal and non-verbal deficits. In the area of verbal communication, students with AS generally have good structural language skills that follow the same trajectory as their typically developing peers (Paul, 2003). However, they often struggle with the pragmatics and semantics of language, making their language poorly equipped for interactive communication and socialization. Often, students with AS will (a) repeat the same word or phrase over and over, (b) speak with exaggerated inflections or in a monotone fashion, (c) discuss at length a single topic that is of little or no interest to others, or (d) find it difficult to maintain an interaction that does not involve a narrowly defined topic (Barnhill, 2001). Students with AS have a difficult time understanding that the same word may have several different meanings. Due to their concrete learning style, they struggle with language that uses abstract concepts such as metaphor, idiom, parable, allegory, and rhetorical questions. The old saw "no sense crying over spilled milk" might lead a student with AS to look for a milk-spilling incident. This language deficit, in addition to their adult-like and often pedantic speech, makes students with AS unappealing to their peers, further exacerbating their isolation. This "odd speech" is also compounded by their non-verbal communication impairments (Williams, 2001).

Non-verbal impairments for a student with AS might include (a) limited or inappropriate facial expressions, (b) awkward body language, (c) limited use of gestures, (d) difficulty with proximity (standing too close or too far away during conversation), and (e) peculiar or stiff eye gaze (Baker, 2003). Students with AS also experience difficulty reading, interpreting, and understanding the facial expressions and body language of others. The extent and nature of these verbal and non-verbal communication deficits put individuals with AS at a clear disadvantage in understanding social situations.

Cognition

In general, individuals with AS have average to above-average intelligence (Klin & Volkmar, 2003). They often take an interest in and talk about topics well beyond their age level. Students with AS typically experience academic difficulties due to (a) poor problem-solving and organizational skills, (b) concrete, literal thinking, (c) difficulty differentiating relevant and irrelevant information, (d) interests that are obsessive and narrowly defined, and (e) low social standing among their peers (Barnhill, Myles, Hagiwara, & Simpson, 2000). While students with AS may be intelligent, their disorder affects how they think, feel, and react. They experience increased difficulties under stress when they tend to react emotionally rather than logically. Myles and Southwick (1999) and Buron and Curtis (2003) posit that it is as if the "thinking center" of the brain becomes inactive while the "feeling center" becomes highly active. All too often, students with AS react without thinking. This inability to inhibit their emotional urges may cause them to engage in rage behaviors.

Another cognitive challenge that students with AS face is the ability to generalize and apply the knowledge and skills they learn across situations, settings, and people. Due to their above-average rote memorization skills, these individuals typically store information as disconnected sets of facts (Barnhill, 2001; Williams, 2001). This often gives others the inaccurate impression that they have learned the information or skill because they are able to recite a rule or set of procedures. However, students with AS typically experience difficulty applying the information they have memorized, as demonstrated by Maggie, a young student with AS, in the following example.

Maggie's traditional strategy for acquiring a toy is to hit the classmate who has the toy she wants. Maggie's teacher worked with her to develop a new strategy. She was taught that when she wants a toy she should do the following:

1. Ask her peer if she can have the toy.
2. If her peer declines, she should ask her peer if he or she could share the toy.
3. If her peer declines again, she should find a new toy until her peer is finished with the toy.

Maggie practiced the new strategy with her teacher and could recite the three steps on request. However, when an actual situation occurred in which Maggie wanted a peer's toy, she reverted to her traditional strategy of hitting. Maggie's teacher inaccurately concluded that Maggie was choosing to be aggressive with her classmates, when in actuality Maggie had not generalized her new strategy beyond the role play with her teacher. Even when students with AS learn more acceptable behaviors,

under stress they may not be able to retrieve and apply the newly learned behavior and instead will retrieve the previous well-practiced behavior (Myles and Southwick, 1999).

Sensory Issues

The majority of students with AS have sensory challenges (APA, 1994; Dunn, Myles, & Orr, 2002; Myles, Cook, Miller, Rinner, & Robbins, 2000). In fact, students with AS experience challenges in each of the sensory areas: visual, tactile (touch), taste, auditory, and smell. For example, it is not unusual for students with AS to be hypersensitive to certain visual stimuli, such as fluorescent lights, and particular sounds, such as the echoing noises common in a gym filled with playing children. Such sensitivity may cause agitation and behavior problems. Some individuals with AS have also been reported to have an inconsistent tolerance for physical pain. In addition, students with AS experience problems in two lesser-recognized sensory areas: prioprioception and vestibular. Proprioception or body awareness provides information to the brain about where a certain body part is and how it is moving. Students with AS often are not able to sit down in a chair without looking and may not know how to put on a shirt without watching themselves in the mirror. Many have problems balancing when walking or "righting" themselves when carrying heavy objects. "Vestibular" refers to understanding information about where our body is in space, and whether or not we or our surroundings are moving. The vestibular system also tells us about speed and direction of movement.

While the sensory issues students with AS have appear similar to those of individuals with autism, their reactions can be more negative. That is, students with AS are more likely to demonstrate tantruming or other disruptive behaviors than children with autism when they experience sensory discomfort (Myles, Hagiwara, Dunn, Rinner, Reese, Huggins, & Stansberry, in press).

Strategies

Several strategies have been found effective in addressing the behavior problems of students with AS. When choosing a strategy it is important to consider the student's unique individual needs and the function of his behavior, because not every strategy is appropriate for everyone. The following strategies were chosen because of their broad nature and ability to be generalized and applied to a variety of behaviors and implemented in a variety of settings, including home, school, and community. These strategies include (a) choice making; (b) the Power Card strategy (Gagnon, 2001); (c) the Incredible 5-Point Scale (Buron & Curtis, 2003); (d) Stop, Observe, Deliberate Act (SODA) (Bock, 2001); (e) social autopsies (Bieber, 1994); and (f) home base.

Choice Making

Throughout their everyday life, students with AS are expected to follow and adhere to adult decisions and agendas to promote their safety and well being. However, there are many opportunities throughout the day when students with AS can be provided with choices. Choice making is a strategy in which small choices and decisions are embedded into daily routines and activities. This strategy allows students with AS to feel like they have some control over the variables and events in their life. While this is important for everyone, it can be particularly beneficial for students with AS because it provides them with opportunities to strengthen their problem-solving skills, build their self confidence, and have control over their environment. While some things are not negotiable, many are. For instance, completing a math assignment is not a choice. But choosing what colors of pencil to use when doing the assignment could be. Reading a story is non-negotiable, but when it gets done could be.

When providing choices, it is often important to ask closed questions rather then open-ended questions. Asking a student with AS, "What game do you want to play," is likely to result in a generic "I don't know" or an inappropriate behavior brought on by an overwhelming number of possibilities. This can be avoided by providing a few concrete options to choose from. "Would you like a banana or an apple for a snack?" "Would you like to play Scrabble or Boggle?" If she comes up with another option, praise her for being creative. Many times students with AS are not aware that there are other options. Help them to identify additional choices available to them. Students with AS also need to be taught the relationship between a choice and its consequence, so they see that choice making can result in different outcomes. Once the student has made a choice it is important that it is carried out so he can learn and experience the consequence or outcome of his choice. Teaching a student with AS to consider the consequences or outcomes of each choice prior to making a decision, verbally or in writing, can help build necessary problem-solving skills (Baker, 2003; Williams, 2001).

The Power Card Strategy

The Power Card strategy uses the student's special interest as a motivator for appropriate behavior. Developed by Gagnon (2001), this strategy can be used to teach students with AS appropriate social interactions, behavior expectations, the meaning of language, and the hidden curriculum through a visual aid that integrates the student's special interest.

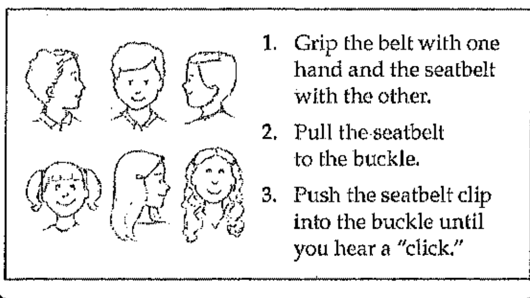
The Power Card strategy is presented to the student on a single sheet of paper or in booklet form. Written in first person, it is a brief account describing how the student's hero, who is associated with his special interest, solves a problem that is similar to an issue experienced by the student. An accompanying Power Card is used as a reminder of

Figure 1 Power Card Script and Scenario
The Brady Bunch Click
by Cindy Van Horn

The Brady children know that before their mother starts the car they have to put on their seatbelts. Greg, Marcia, Peter, Jan, Bobby, and Cindy all know that wearing their seatbelts in the car keeps them safe in case their car is in an accident or if the car has to stop quickly. With six children in the family, Mrs. Brady cannot help each child put their seatbelt on, so they had to learn how to do it on their own. When they hear the "click" of the seatbelt, it makes them feel happy because they know that they will be safe. Now, when they ride in their friend's car, they can buckle their own seatbelt and do not have to ask for help. The Brady children want you to be safe when you ride in the car. They know that you too can buckle your own seatbelt if you follow these steps:

1. Grip the buckle with one hand and the seatbelt with other.
2. Pull the seatbelt to the buckle.
3. Push the seatbelt clip into the buckle until you hear a "click."

The Brady children love to go places and know that the only way they can get there is in the car. They know how important it is to be safe, so they always wear their seatbelts. Greg, Marcia, Peter, Jan, Cindy, and Bobby want you to be safe too, so *Please make it CLICK!*



the steps the student should follow to solve a similar problem himself.

The brief scenario created describes a behavior or situation that is difficult for the student and incorporates the student's hero, role model, or special interest. The scenario is written at the student's comprehension level and can vary in size, length, font, and number of visuals. Relevant pictures or graphics of the special interest, including photographs, drawings, magazine pictures, and computer-generated images, can be included. The first paragraph of the scenario describes the hero successfully attempting a solution to a problem. The second paragraph encourages the student to attempt the solution, which is simplified into three to five manageable steps.

The Power Card is provided as a generalization aid. It is the size of a trading card, bookmark, or business card that can be carried with the student throughout the day or placed on the corner of the student's desk. It contains the three to five manageable solutions along with a small picture. *Figure 1* contains a sample of a Power Card script and Power Card that was used with Bryan, a seven-year old with AS who refused to wear his seatbelt. Using the characters of Bryan's favorite television show, the *Brady Bunch*, the script and card helped him to buckle up independently.

The Incredible 5-Point Scale

Our ability to quickly assess the consequences of our behavior directly impacts how we act, react, and interact in difficult situations. This ability requires self-awareness and self-regulation, skills that are lacking in many students with AS. Social competence can be greatly enhanced when an acceptable behavior is broken down into clear, concrete parts. Developed by Buron and Curtis (2003), the Incredible 5-Point Scale is designed to assist students with AS and related disabilities in understanding social interactions and controlling their emotional responses. Rating scales are not new to the field of education and have been used to allow students to rate their feelings of anger, fear, pain, etc. Buron and Curtis discovered that many of the students with AS responded well to a rating scale that allowed them to "talk in numbers" instead of using socially and emotionally loaded language. This format matches the major learning characteristics of many students with AS by using a clear, concrete visual that allows numbers to represent abstract ideas such as feelings, emotions, and behaviors.

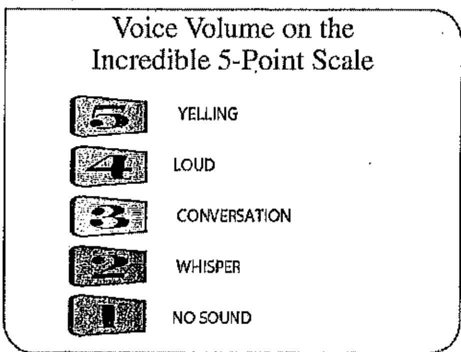
Essentially, the Incredible 5-Point Scale involves identifying a behavior or problem situation and determining a rating scale for the behavior choices available to the student. If possible, the student with AS should develop the rating scale like James does in the following example.

James, a nine-year old with AS, had a difficult time understanding that, when watching a movie at a theater, it is polite to whisper, if you must talk at all. James' parents decided to use the Incredible 5-Point Scale to explain an appropriate voice volume for the theater. The scale was entitled "Voice Volume." James, with the help of his parents, determined the ratings like so: 5 = yelling, 4 = loud talking, 3 = soft talking, 2 = whispering, 1 = no talking. James was told that when watching movies at a theatre he needs to use his "2" or "1" voice volume. *Figure 2* provides an example of James' Incredible 5-Point Scale.

Stop, Observe, Deliberate, Act (SODA)

As stated earlier, individuals with AS do not pick up on the nuances of everyday social interactions and situations. They struggle to understand

Figure 2 The Incredible 5-Point Scale



social cues and have a tendency to apply a strict, inflexible set of rules to all social situations. In an attempt to help young people with AS successfully navigate new social situations, Bock (2001) developed the social behavioral learning strategy Stop, Observe, Deliberate, Act (SODA). SODA helps students with AS replace their own inflexible and ineffective social interaction rules with effective strategies. Each SODA component includes three to five questions or statements that serve as an ongoing cueing system (see *Figure 3*).

The first component, Stop, allows the young person to use self-questioning to determine the room arrangement, sequence of events, or social routines associated with the setting.

The second component, Observe, helps the student note social cues used by people in that setting. The student should take note of the general length of a typical conversation, as well as what happens when the conversation ends.

The third component, Deliberate, encourages the student to consider how others perceive them and to think about what they might do and say. At this stage, the student needs to understand the role of non-verbal social cues, including: gestures, body language, eye gaze, intonation, proximity, and facial expression.

The forth and final component, Act, builds on the student's interactions with others. The student approaches a person or group with a plan to participate in the conversation.

Social Autopsies

The social autopsy strategy was developed to help students with social problems learn to interpret social and behavioral situations, and understand social mistakes (Bieber, 1994). It is a mechanism for analyzing a social skills problem by dissecting social incidents. When a social error occurs, the student with AS works with an adult, such as a teacher, counselor, or parent, to (a) identify the social error or mistake, (b) determine who was harmed by the mistake, (c) decide how to correct the mistake, and (d) develop a plan to ensure that the mistake does not reoccur.

According to Lavoie (cited in Bieber, 1994), the social autopsy is particularly effective in helping a student with AS see the cause/effect relationship between his social behavior and the reactions of others. The success of the autopsy strategy is due to its consistent structure of practice, immediate feedback, and positive reinforcement. Therefore, every adult with whom the student with AS has regular contact should know how to implement a social autopsy in order to promote skill acquisition and generalization. Social autopsies should not be used as a punitive measure but rather as a constructive and positive problem-solving strategy experience for the student. The social autopsy stages can be illustrated by using written words or phrases or pictorial representations. *Figure 4* (see following page) provides a worksheet that can be used when practicing a social autopsy with a student with AS.

Figure 3 SODA

SODA

Stop

What is the room arrangement?

What is the activity, schedule, or routine?

Where should I go to observe?

Observe

What are the people doing?

What are the people saying?

What is the length of the typical conversation?

What do people do after they have talked?

Deliberate

What would I like to say?

What would I like to do?

How will I know if others would like to continue talking or end the conversation?

Act

Approach person(s) to talk to.

Greet the person(s).

Listen and ask related questions.

Look for cues to know if the person(s) would like to continue talking or end the conversation.

End conversation; walk away.

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Home Base

The home base strategy supports students' ability to function within their environment whether it is at home, school, or out in the community. A home base is a place where the student can go to (a) plan or review daily events, (b) escape the stress of their current environment, or (c) regain control if a tantrum, rage, or meltdown has occurred. The location of home base is not important—it can be a bedroom or resource room. What is important is that the student with AS perceives the home base as a positive and reassuring environment. Home base should never be used as a time out or as an escape from tasks and activities. For example, when a student goes to home base at school, she takes her assignment with her. The home base may contain some sensory items designed to help the student calm herself, such as a bean bag chair, weighted blanket, or mini-trampoline.

It may be necessary to schedule the use of home base as a regular

Figure 4 Social Autopsy Worksheet

What happened? ______________________________

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What was the social error?	Who was hurt by the social error?

What should be done to correct the error? ______________________________

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What could be done next time? ______________________________

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part of the student's day. At the beginning of the day, home base can be a place to preview the day's schedule, introduce and get familiar with changes in the typical routine, ensure that materials are organized, or get "primed" for specific subjects (Myles & Adreon, 2001). Home base is also effective when it is scheduled after a particularly stressful activity or task. The following example illustrates how home base can typically be used.

Terry sometimes became anxious or stressed during transitions or difficult subjects and could not calm himself without assistance. Terry's teacher set up a home base in the resource room that had a beanbag, a small stereo with headphones, and a weighted blanket. Each morning when Terry arrived at school via bus, he would go to his home base. He would listen to music while sitting in the beanbag chair. This helped him calm himself from the stressful bus ride. After 10 to 15 minutes of this routine, Terry and his teacher would review the day's schedule so that he was prepared to start his day. Terry also visited his home base daily after recess because he had difficulty moving from "play" to "learn" mode.

Summary

This article has provided an introduction to the difficulties experienced by students with AS and six strategies that can be easily implemented by teachers or parents to help students acquire the skills needed to function more successfully.

These interventions help to clarify tasks and demands, provide opportunities for stress reduction, increase student motivation, and build an understanding of our complex social world. Implementation of these strategies across environments can facilitate school and life success for students with AS, a group whose worlds we are just beginning to understand.

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