Supporting College Students with Asperger Syndrome

A Sabbatical Report

by

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Abstract

Over the years, a marked increase in the number of students with Asperger Syndrome (AS) attending colleges and universities has occurred. Yet, many professionals working in higher education find themselves ill-equipped and unprepared to address and manage the cognitive, social, executive functioning and behavior deficits that impact a student with AS ability to succeed in an academic environment. The following report discusses symptoms and key features associated with AS that effect performance in an academic environment, provides suggestions for possible accommodations and educational adjustments and offers strategies to professionals working in higher education that support student success and retention.

Students with Asperger Syndrome (AS) are becoming more and more prevalent on community college campuses. Yet, colleges remain largely unprepared to receive and serve them. Some students, due to their perseverance, resourcefulness and family support succeed. Others, tragically, fall through the cracks.

Unlike other groups of students with disabilities, the challenges faced by students with AS tend to be more in the social and self-regulatory areas. This often poses particular challenges for counselors and faculty who may not be accustomed or familiar with the resources and support needed for academic and life success. Students with AS are often very intelligent and academically inclined. Yet, they experience significant social and interpersonal deficits, organizational difficulties and lack self-advocacy skills, the very skills that are necessary for success in a college setting (Wolf, Thierfeld Brown, Bork, & Shore, 2004). Addressing the disability related needs of a student with AS requires a shift from the traditional methods of accommodating to ones that improve social, communication and pragmatic functioning. Therefore, professionals in higher education need to increase their understanding of the unique challenges faced by students with AS so they can be more skilled at recognizing and accommodating their symptoms and behaviors in the classroom and campus at large. The more knowledgeable professionals are, the more they can influence student success, retention and overall experience and satisfaction with their respective institution.

This report details the defining characteristics and symptoms associated with a clinical diagnosis of AS, discusses current incidence/prevalence rates and examines the possible causes of AS. Further, secondary disabilities associated with AS are reviewed and accommodations and support services addressing cognitive, behavioral, social and executive functioning skills are presented. Lastly, specific issues for counselors serving students with AS are considered and strategies for working with instructional faculty are offered.

What is Asperger Syndrome?

Definition & Diagnosis

AS is one of several disorders grouped by the Diagnostic and Statistical Manual of Mental Disorders-IV Text Revision (DSM-IV-TR) as Pervasive Developmental Disorders (PDD). It is considered a subgroup within the autistic spectrum disorders and has its own diagnostic criteria. AS is characterized by significant difficulties in social interaction, restricted and repetitive patterns of behavior and an intense development of special interests. It differs from other autism spectrum disorders by its relative preservation of language and intellectual skills. Also frequently associated with, but not required for diagnosis of AS, is physical clumsiness and atypical use of language. Specific diagnostic criteria for AS as outlined in the DSM-IV-TR is as follows:

DSM-IV-TR Diagnostic Criteria for Asperger Syndrome (American Psychiatric Association, 2000)

A. Qualitative impairment in social interaction, as manifested by at least two of the following:
1. *marked impairment in the use of multiple non-verbal behaviors such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction*
2. *failure to develop peer relationships appropriate to developmental level*
3. *a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g. by a lack of showing, bringing, or pointing out objects of interest to other people*
4. *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 that is abnormal either in intensity or focus*
2. *apparently inflexible adherence to specific, non-functional routines or rituals*
3. *stereotyped and repetitive motor mannerisms (e.g. hand or finger flapping or twisting, or complex whole-body movements)*
4. *persistent preoccupation with parts of objects.*

C. The disturbance causes clinically significant impairment in social, occupational, or other important areas of functioning.

D. There is no clinically significant general delay in language (e.g. single words used by age two years, communicative phrases used by age three years).

E. 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.

F. Criteria are not met for another specific Pervasive Developmental Disorder or Schizophrenia.

Research indicates that the average age for a diagnosis of AS is around eight years; however, age

range does vary from young children to adults (Eisenmajer et al., 1996). In his book, *Asperger's Syndrome: A Guide for Parents and Professionals*, Tony Attwood (1998) identifies six pathways to diagnosis:

1. ***Diagnosis of autism in early childhood*:**

   Some children who display classic signs of autism in their pre-school years may progress in their communication abilities and show marked improvement in their language skills. Thus, a previously withdrawn and significantly language-impaired child develops fluent speech, is no longer aloof and silent and exhibits behavioral patterns and abilities that become more consistent with a diagnosis of AS.

2. ***Recognition of features when first enrolled in school:***

   A child's development in pre-school years may not have been particularly unusual and parents and professionals alike may not have suspected anything remarkable or out of the ordinary. However, a child's teacher may become concerned with certain aspects of a child's behavior like avoiding social play, not understanding the rules of social conduct, exhibiting peculiar qualities in their conversation and imaginative play, displaying an intense fascination with particular topics, and clumsiness when drawing, writing or playing ball. While such behaviors may be unusual, they are often not regarded by teachers as a priority for referral for diagnostic purposes. Instead, these children are simply viewed as "odd."

3. ***An atypical expression of another syndrome:***

   A child's early development and abilities may have led to the diagnosis of another disorder or syndrome. For example, delayed language development may have led to the assumption that the child has a language disorder, remedied by treatment from a speech therapist. However, careful consideration of other aspects of the child's development, namely social, cognitive, behavioral and

interest traits, may suggest a profile that is more complex.

4. ***Diagnosis of a relative with autism or AS:***

When a child is diagnosed as having autism or AS, parents become more knowledgeable and informed about the various ways these conditions are expressed. Often, there are families with more than one child with AS or where the condition is present in several generations.

5. ***A secondary psychiatric disorder:***

A person with AS may have progressed through their elementary school years as a somewhat eccentric or reclusive child, but not exhibit symptoms that would warrant a referral for a diagnostic assessment. As a teenager, however, the person may become increasingly aware of their social isolation and may make attempts to improve their social contacts. Often, these attempts are met with ridicule, exclusion, teasing and bullying, which may ultimately cause a person to have anxiety or depression. In turn, a referral to a psychiatrist is made who may recognize that that the anxiety or depression is a secondary result of AS.

6. ***Residual AS in an adult:***

As awareness of the nature of AS has increased, some adults are seeking a diagnostic assessment for themselves. They may be the parent or relative of a child who is diagnosed with AS and recognize that some of defining characteristics were present in their childhood and adolescent years. Others may have read about AS and feel that they exhibit features of the syndrome. Yet, there are situations whereby adult psychiatric services also diagnose someone as having AS in addition to an original diagnosis of schizophrenia or alcoholism, for example.

Symptoms:

While the clinical presentation of AS varies, “a lack of social understanding, limited ability to have a reciprocal conversation and an intense interest in a particular subject are the core features of this

syndrome" (Attwood, 2007, pg. 12). A person may have mild to severe symptoms coupled with their own unique characteristics, abilities and life experiences. Therefore, no two persons with AS are alike, but may share common traits.

Social Behavior:

A distinctive feature of AS involves a significant impairment in social interaction. Skills that are often considered natural or intuitive such as maintaining eye contact, initiating and ending conversations, and regulating appropriate social distance are typically impaired. A person with AS may avoid eye contact, have difficulty understanding and responding to verbal and nonverbal cues signifying the desire to change or end a conversation, and may invade one's personal space without any apparent concern. This social awkwardness may appear as a disregard for other people when in actuality, the person with AS simply does not feel comfortable making eye contact, does not "get" how conversations are regulated and is unaware of the codes of social conduct as they relate to personal space. Not recognizing what appropriate social signals are or knowing how to respond to them often leads to uncomfortable and awkward social interactions. Repeated attempts to socialize are often faced with rejection or ridicule. This lack of social acceptance frequently impacts the development of self-esteem and can lead to intense anxiety, depression or phobic reactions to social situations.

Language Patterns:

While the development of speech and language skills of persons with AS is relatively normal, language *use* is often strange and unusual. The differences are noted in the specific areas of pragmatics (how language is used in a social context), semantics (not recognizing there may be more than one meaning) and prosody (unusual pitch, stress or rhythm).

Pragmatics: Often referred to as "the art of conversation," a person with AS may display significant deficits in the practical skills needed to have a natural conversation. Children or adults with AS

may not follow the traditional rules regarding how to initiate, maintain and end a conversation or may attempt to start or participate in a conversation with a comment or statement that is completely irrelevant to the topic at hand. Further, the person with AS is usually unaware of the non-verbal signals that regulate the flow of conversation and oblivious to signs indicating confusion, disinterest or a desire to end the interaction. Not knowing or understanding the language codes for conversing with others may cause some people to erroneously conclude that the individual with AS is disinterested, rude or self-centered, thereby leading to rejection. This, in turn, may cause the person with AS to withdraw and become socially isolated.

Semantics: Persons with AS tend to interpret language literally. Thinking is often very concrete and concepts and meanings are related to a single context. A person with AS may have particular difficulty understanding sarcasm, figurative language, jokes, idioms and innuendos. Language comprehension problems can cause great confusion for the person with AS since they are often unaware of the hidden, implied or multiple meanings of words.

Prosody: The speech of a person with AS often appears to lack variation in intonation, stress and rhythm, i.e. the prosody or melody of speech (Attwood, 2007). Speech patterns can lack modulation, have a monotonous or flat quality and are often rigid or robotic. Persons with AS may talk too loudly, with little awareness of its inappropriateness or pause a long time before responding to others when being addressed. Speech style is often characterized as pedantic, i.e. overly formal and at times pompous or pretentious. Characteristics include providing too much information, an emphasis on rules and minor details and a tendency to correct errors.

Restricted and Repetitive Interests, Routines and Behaviors:

People with AS have a tendency to become unusually fascinated by a special interest that often dominates their time and conversation. A pre-occupation with collecting specific items such as bottle caps, yellow pencils, trains or vacuum cleaners are examples of special interest topics displayed by children with

AS. Interests become all-consuming, abnormally intense in their focus, and are typically solitary activities that dominate their thoughts and play. A fascination with collecting an object often progresses to a fascination with the topic. Common interest topics include transportation modes such as trains and trucks, dinosaurs, electronics, science and sports statistics and records. The person may begin reading incessantly about the subject, gathering and memorizing details and facts, and talking non-stop about the topic, oblivious to others' disinterest (Attwood, 2007). As adults, persons with AS may become regarded as experts in a specialized subject, excel academically in that specific area, and later pursue it as a possible means of employment. Special interests, however, may suddenly be dropped and soon replaced by another topic. What once seemed to occupy and consume their existence abruptly loses its appeal and a new interest area emerges.

Another characteristic that is prevalent in many persons with AS is the propensity to establish and develop rituals and routines that they adhere to rigidly. Routines may be imposed to make life orderly and predictable, as novelty and uncertainty cause confusion, anxiety and fear (Attwood, 1998). The establishment of a routine guarantees that change will not occur, thereby ensuring consistency, reducing anxiety and providing stability. Consequently, persons with AS can be inflexible, insist that things be done in a particular way, and resist any alteration to their daily routine. College students with AS can be thrown by sudden changes to their class schedule, testing dates, or course requirements. They may feel inordinately upset, become agitated and display unusual or even aggressive behavior (Bedrossian & Pennamon, 2007).

Stereotypical and repetitive motor behaviors such as hand flapping or complex whole-body movements like rocking or spinning are also a core feature of the diagnosis of AS. These behaviors can be an expression of excitement or a means of relaxation. In some cases, however, involuntary movements or tics could be a sign of a dual diagnosis of Tourette's disorder (Attwood, 2007). These movements are

more characteristic of children with AS and often become less frequent or even disappear as the person matures. Occasionally, these behaviors may be observed in adults with AS, particularly during times of extreme stress, and are likely to take a less noticeable form as in finger tapping or flicking (South, Ozonoff and McMahon, 2005).

Other Associated Symptoms: Poor Motor Coordination, Sensory Sensitivity and Psychiatric Disorders

Frequently associated with, but not part of a clinical diagnosis of AS is poor motor coordination. Weakness in motor skills, including, clumsiness, unusual or stiff gait and illegible handwriting are features that are often present in persons with AS (Jamieson and Jamieson, 2004). Participation in athletics or regular exercise is often limited and many may have poor muscle tone as a result (Bedrossian and Pennamon, 2007). Some adults with AS continue to struggle with "knowing where their body is in space" which often causes them to trip, bump into objects and spill things (Attwood, 2007).

Sensory sensitivity is another common feature of AS that has been well as noted in the literature (Dunn, Smith Myles, & Orr, 2002; Rogers & Ozonoff, 2005). In fact, evidence suggests that about 40 percent of young people with AS have some abnormality with sensory sensitivity (Rimland, 1990). Individuals with AS may report hyper (over) or hypo (under) sensitivity to information received by their senses. Sights, sounds, smells and tastes may be exaggerated, agitating and even painful (Wolf, Thierfeld Brown & Bork., 2009). Lights, classroom noise, and smells of other students' perfume, lotion or aftershave can be disturbing for students with AS and interfere with their learning environment. In response to sensory overload sensations, many students with AS engage in behaviors referred to as "stimming." "Stims" are repetitive behaviors that seem to reduce the anxiety associated with sensory overload and enhance focus and concentration. Examples include spinning or whirling, repetitive finger flicking or fiddling with objects. According to Wolf et al. (2009), "Stims serve an adaptive purpose and should not be forbidden. Rather, the student should be helped to develop stims that are not disruptive and do not call undue attention to the

student" (Wolf et al., 2009, pg. 24).

While persons with AS are characterized by deficits affecting their ability to socialize and communicate effectively with others, many also experience significant emotional difficulties indicating the possible presence of a mood disorder. Trying to cope with and manage emotional reactions associated with social situations, sensory exposures and changes in daily life, persons with AS often feel as if they are in a constant state of alertness and anxiety, thereby making them prone to mental and physical exhaustion. Anxiety and depression are common psychiatric conditions associated with the clinical diagnosis of AS and are generally present in adolescents and young adults (deBruin, Ferdinand, Meester, & De Nijs, 2007; Fizgerald, 2007 & Ghaziuddin, Ghaziuddin, & Greden, 2002).

Incidence/Prevalence Rates:

The incidence rates of AS, i.e. number of new cases occurring in a specified time period such as one year, have increased in the last decade (Gillberg & Wing, 1999; Prior, 2003; Rutter, 2005b). The Centers for Disease Control and Prevention (CDC) considers it an "urgent public health concern" and is attempting to determine how many children have an Autism Spectrum Disorder (ASD) (www.cdc.gov). The prevalence of ASD in the United States, i.e. how many individuals have the condition at a specific point in time, is reported by the CDC as about 1 in 110 children, on average, for all disorders on the spectrum. Further, national surveys by the CDC revealed that boys were nearly four times more likely than girls to be diagnosed with autism and that ASDs are reported to occur in all racial, ethnic and socioeconomic groups. Some theorize that this increase in prevalence is a result of a broader definition of the diagnostic criteria of ASDs coupled with better efforts in diagnosis rather than an actual increase in the number of autistic people (Rutter, 2005a, 2005b; Shattuck, 2006). Nevertheless, a true increase in the number of people with an ASD has occurred and cannot be ignored.

Possible Causes:

While the causes of ASDs remain unknown, medical researchers suspect that autism has multiple causes that manifest themselves differently among affected individuals. In addition, there may be many different factors such as environmental, biologic and genetic factors that make a child more likely to have an ASD. Most scientists agree, however, that there is a genetic link to ASDs and that AS is a genetic neurodevelopmental disorder. As reported by the CDC, research findings that point to genes as being one of the risk factors that make a person more likely to develop an ASD have shown:

1. Among identical twins, if one child has an ASD, then the other will be affected about 60 – 96% of the time.
2. In non-identical twins, if one child has an ASD, then the other is affected about 0-24% of the time.
3. Parents who have a child with an ASD have a 2%–8% chance of having a second child who is also affected (www.cdc.gov).

Other causes and risk factors for the development of an ASD reported by the CDC are as follows:

- ASDs tend to occur more often in people who have certain other medical conditions. About 10% of children with an ASD have an identifiable genetic, neurologic or metabolic disorder such as:
    - Fragile X syndrome
    - Tuberous sclerosis
    - Down syndrome
    - Other chromosomal disorders
- Some harmful drugs taken during pregnancy also have been linked with a higher risk of ASDs, for example, the prescription drugs thalidomide and valproic acid.
- The once common belief that poor parenting practices cause ASDs is not true.
- There is some evidence that the critical period for developing ASDs occurs before birth. Nevertheless, concerns about vaccines and infections have led researchers to consider risk factors before and after birth. To date, however studies continue to show that vaccines are **not** associated with ASDs (www.cdc.gov).

Secondary Disabilities Associated with Asperger Syndrome:

Children and youngsters diagnosed with an ASD on average have more mental health problems as compared to their intellectually matched and same-age typically developing peers (Brereton, Tonge, & Einfeld, 2006). Among the most common mental health problems are depressive disorder (Pearson et al.,

2006), anxiety disorders, specifically obsessive-compulsive disorder (OCD; Kobayashi & Murata, 1998), and attention-deficit/hyperactivity disorder (ADHD; Lee & Ousley, 2006). These, along with other disabilities, are discussed below.

Depression:

As previously mentioned, people with AS are vulnerable to depression. In fact, research studies have revealed that about one in three children and adults with AS suffer from a clinical depression (Ghaziuddin, Wieder-Mikhail & Ghaziuddin, 1998; Kim et al., 2000; Wing, 1981). While the reasons for persons with AS to become depressed are many, they include, but are not limited to: 1) feeling unaccepted and misunderstood, 2) mental exhaustion from trying to succeed socially, 3) feelings of loneliness resulting from social isolation and 4) repeatedly being tormented, teased, bullied and ridiculed by peers (Attwood, 2007). Students with AS often make comments such as "I feel I don't belong," or "I just don't fit in." The depression, if untreated, can lead to severe social withdrawal and even to self-loathing or self-harming. Professionals working with students with AS, who also suffer from depression, need to be aware of its impact on the individual and insure that proper referrals and/or accommodations are made so that the student can succeed academically.

Anxiety:

While anxiety and its manifestations are a "normal" aspect of life, many people with AS experience chronic anxiety problems that disrupt and interfere with daily functioning. They are particularly prone to anxiety disorders because seemingly benign everyday situations and interactions are anxiety provoking and often lead to intense distress. Tony Attwood (1998) states that "many young adults with AS report intense feelings of anxiety, an anxiety that may reach a level where treatment is required" (Attwood, 1998, pg. 26). The most common types of anxiety disorders for persons with AS are: OCD, Post Traumatic Stress Disorder (PTSD), school refusal, selective mutism and social anxiety disorder (Ghaziuddin, 2005b).

For minor levels of anxiety, stress management programs and techniques such as deep breathing, relaxation, distraction and physical activity can be effective. For serious anxiety disorders such as OCD, treatment is a combination of psychotherapy and medication.

Attention Deficit Hyperactivity Disorder (ADHD):

Problems with attention are frequently associated with AS. In fact, studies suggest that at least 75 per cent of children with AS exhibit signs and symptoms consistent with the clinical diagnosis of ADHD (Fein, Dixon, Paul & Levin, 2005; Goldstein & Schweback, 2004; Holtmann, Bolte & Poustka, 2005). The ability to sustain, alternate, divide or selectively attend to what is relevant can be problematic for some people with AS. In classroom situations, students with AS may *appear* to be attentive to the task at hand when in fact they are not. They are often distracted and confused by other stimuli and may need specific direction and instruction as to what they need to focus on. Moreover, some students with AS have difficulty with mental flexibility and are challenged by the need to shift their train of thought. Any changes or alterations brought to academic activities can be particularly stressful and are often met with resistance. Classroom accommodations that include strategies to maintain and improve attention coupled with efforts to assist in transitions can be effective for students with AS. Further, persons with a combination of AS and ADHD may also find value in treatment with medication.

Tics and Tourette's Syndrome:

Involuntary movements or tics are occasionally seen in people with AS. Indeed, research has revealed that between 20 and 60 percent of children with AS develop tics (Gadow & DeVincent, 2005; Hippler & Klicpera, 2004; Kerbeshian & Burd, 1986, 1996; Marriage, Miles, Stokes & Davey, 1993). The movements are characterized by motor tics, ex. eye blinking, facial grimacing and nose twitching or vocalizations, ex. throat clearing, barking and whistling that peak in frequency and complexity between the ages of 10 and 12. The involuntary movements or sounds are unexpected, purposeless and difficult to

control or inhibit. They can interfere with classroom activities by causing disruption to the person's attention or the attention of others. Children who develop tics, however, are usually "tic-free" by adulthood or 18 years of age (Burd, Kerbeshian, Barth, Klug, Avery & Benz, 2001) but are at greater risk of showing signs of ADHD and of developing OCD (Epstein & Saltzman-Benaiah, 2005; Gadow & DeVincent, 2005).

Eating Disorders:

Concerns about food or food intake are sometimes associated with persons with AS, particularly in childhood, adolescence and young adulthood. Some people with AS may refuse to eat foods with a certain texture, smell or taste due to a sensory hypersensitivity (Ahearn, Castine, Nault & Green, 2001). Further, there may be unusual food preferences and routines associated with meals. Diet may be limited to specific foods that are eaten at every meal and in some cases, diet is restricted to only certain brands of a particular food (Jamieson & Jamieson, 2004). These problems may become more pronounced during adolescence, with approximately 18 to 23 per cent of adolescent girls with anorexia nervosa also show signs of AS (Gillberg & Billsteadt, 2000; Gillberg & Rastam, 1992; Rastam, Gillberg & Wentz, 2003). Treatment includes education about nutrition and healthy eating habits and in more serious eating disorders as in anorexia nervosa, medical and/or therapeutic intervention may be needed.

Non-Verbal Learning Disability:

Some students with AS may present with an unusual profile of intellectual and academic abilities whereby formal testing by an appropriate professional indicates a significant discrepancy between verbal reasoning abilities (Verbal IQ) and visual-spatial reasoning (Performance IQ). If the discrepancy reveals a significantly higher Verbal IQ, a subsequent or more detailed assessment of cognitive abilities may indicate a diagnosis of a Non-Verbal Learning Disability (NLD) (Attwood, 2007). Strategies to facilitate learning coupled with academic adjustments for students with a NLD can also be applied and authorized to those with AS who have the same or similar profile of cognitive abilities.

Accommodations & Support Services:

Students with a clinical diagnosis of AS that is verified by a qualified diagnostic professional are eligible to receive reasonable accommodations, academic adjustments and/or auxiliary aids and services under Section 504 of the Rehabilitation Act of 1973 (www.hhs.gov/ocr/504.pdf) and The Americans with Disabilities Act (www.ada.gov). Professional counselors working in Disabled Students Programs and Services (DSPS) offices on college campuses are typically the ones who meet with the student with AS and review medical, psychological and psychoeducational documentation to verify disabilities, determine the functional limitations that are associated with a particular disability and authorize appropriate accommodations and services. Each accommodation must be linked to a student's individual needs and the most suitable and effective accommodation must be explored. Sample forms and tools designed to elicit information specific to the student with AS are provided in Appendix A.

While DSPS offices are accustomed and proficient in working with students with disabilities, many remain challenged and unfamiliar with the unique characteristics, traits and needs of the student with AS. Students with AS exhibit pervasive difficulties in all aspects of higher education, including social, cognitive and executive functioning domains (Wolf et al., 2009). For most college service providers, the challenges lie in understanding and assisting the student with social, communication and executive functioning difficulties as these seem to be the most problematic for the student with AS. Successful accommodation and assistance often requires unconventional solutions tailored to the individual's needs, requirements and preferences (Bedrossian & Pennamon, 2007). Further, to develop effective strategies and solutions, college professionals must consider the immense variability among students with AS and acknowledge that what works for one student with AS may not work for another. In other words, accommodations and services must be individualized for the student and not "prescribed" for their particular diagnosis. As so eloquently stated in Wolf et al. (2009), "one does not accommodate AS, but rather accommodates a

student with an autism spectrum diagnosis that affects him or her in a uniquely individual manner" (Wolf et al., 2009, pg. 83). Following is an overview of the cognitive, social and behavioral issues that impact many students with AS in an academic environment as well as daily life.

Cognitive Issues:

- Attention/Concentration difficulties
  - Easily distracted
  - Tendency to fixate on details
  - Often preoccupied with specific topics of interest
  - Sensory overload
  - Difficulty shifting attention when needed
  - Pay attention to relevant information while filtering irrelevant details
  - Encode attention, i.e. remember what was attended to

- Problems with executive function skills
  - Organizational and planning abilities
  - Working memory
  - Inhibition and impulse control
  - Self-reflection and self-monitoring
  - Time management and prioritizing
  - Understanding complex or abstract concepts
  - Using new strategies

- Problem solving
  - Inflexible thinking
  - Exhibit a “my way” approach to problem solving and reject recommendations offered by others
  - Less likely to learn from mistakes (Attwood, 2007)

- Slow processing speed

- Language problems
  - Expressive and receptive language difficulties
  - Literal interpretation of language
  - Pedantic speech style
  - Monotonous tone of voice or odd/inappropriate intonation
  - Tendency to dominate conversations
  - Echolalia (repetition of other people’s words and phrases) and palilalia (repetition of one’s own words)

- Sensory Sensitivity
  - Hyper and hyposensitivity to sensory experiences
  - Sensory distortions

  - Sensory 'tune outs'
  - Sensory overload
  - Unusual sensory processing
  - Difficulty identifying the source channel of sensory information (Bogdashina, 2003; Harrison & Hare, 2004)

- Theory of Mind, "the ability to appreciate that the contents of someone else's mind are different from one's own" (Wolf, Thierford Brown & Bork, 2009, pg. 227) or "the ability to recognize and understand thoughts, beliefs, desires and intentions of other people in order to make sense of their behavior and predict what they are going to do next" (Attwood, 2007, pg. 112)

Social Issues:

- Poor social interaction skills
- Social anxiety
- Difficulties with social rules
- Problems with understanding another's perspective
- Prone to bulling and social manipulation
- Difficulty expressing emotions
- Problems working collaboratively with others
- Limited or unusual facial expression and eye contact

Behavioral Issues:

- Rigid, stereotyped behaviors
- Interrupting/speaking out of turn
- Correcting the instructor
- Walking out of the classroom
- May be argumentative and inflexible
- Perfectionism
- Resistance to change

Because each student with AS is different and is challenged by individual disability-related issues that impact success in a college classroom environment, accommodations and support services must be tailored and connected to a their specific functional needs. Some of the common adjustments and accommodations DSPS offices authorize to students with AS noted by Bedrossian & Pennamon (2007) and Wolf, Thierford Brown & Bork (2009) include, but are not limited to

Testing Accommodations:

- Extended time for test taking

- Distraction-reduced/private testing environment
- Use of a computer with word-processing software for essay tests
- Use of noise-reducing devices such as white noise machines or ear plugs
- Ability to provide answers directly on test, no scantron forms

Classroom Accommodations:

- Note-taking services
- Audio recording device
- Preferential seating
- Breaks as needed
- Laptop for note-taking
- Copies of class PowerPoint presentations
- Priority registration
- Behavioral contracts for guidance (not code of conduct issues)
- Permission to bring sensory objects
- No cold-calling in class (call on student and return for response later)
- Clarification of information particularly with assignments, test questions or paper topics

Oral Presentation Accommodations:

- Webcast or videotape presentation
- Present to professor only
- Alternate assignment (if allowable and acceptable)

Other Support Services:

- Disability-management counseling
- Liaison services with college faculty/staff
- Student support group
- College success course designed for students with AS
- Individual tutoring services

While accommodating the cognitive, social and behavioral issues that impact the success of a student with AS in an academic environment is essential, it is equally important to provide support to the greater challenges experienced by a student with AS that involve skills that do not *necessarily* require mandated accommodations but are crucial skills for student success. Scripting a scenario with the student on how he might ask a professor a question, breaking assignments down and prioritizing tasks, assisting with managing time, role-playing with student on how he might interact with peers during group activities, understanding the class syllabus and learning how to effectively cope with anxiety and confusion are

examples of skills that a student with AS may need support, a strategy or resource to succeed in college. Refer to Appendix B for a template provided by Bedrossian & Pennamon (2007, pg. 89-94) that assists with identifying a student's functional limitations, possible accommodations, strategies and resources that may help promote academic, social and life success.

Special Considerations for Counselors serving Students with AS:

Effective counseling provided to students with AS requires knowledge and understanding of the distinct characteristics and social problems associated with AS as well as the ability to develop a respectful, trusting and collaborative partnership with the student and his/her family. More often than not, parents of students with disabilities, particularly students with AS, continue to be actively involved in the education of their child well into their adult years. Therefore, providing an environment that is conducive to open communication whereby the student and family member feel comfortable and confident in the helpings of the counselor is essential. Developing a partnership that acknowledges and respects the parents' knowledge and skill in providing service to their child coupled with a sense of confidence in the DSPS counselor's expertise in working and serving students with AS establishes the foundation for a successful relation. For the most part, building a collaborative relationship is relatively easy to do when a skilled counselor well-versed with AS and related issues is involved. However, there are circumstances professional counselors working in a community college setting occasionally face that require them to manage challenging student or parent behavior by establishing boundaries (Wolf, Thierford Brown & Bork, 2009).

Setting Boundaries:

Working with students with AS involves addressing social, communication, executive functioning and behavior difficulties that impact skill acquisition, learning and performance. For many students with AS, however, the greatest challenges they face are in the social and self-regulatory areas, rather than in

the academic and cognitive domains (Sicile-Kira, 2004). High intellectual skills lead students with AS to pursue higher education, but limited social skills, problems with social behavior and self-advocacy skills often interfere with their ability to succeed. Therefore, counseling students with AS frequently involves instruction regarding appropriate interpersonal and classroom behavior as well as social skills training that includes developing social scripts, role-playing and providing feedback regarding social communicative behavior. Such service, however, requires a fair amount of time and individual student contact, which is not always possible. Thus, it is important to set clear guidelines and expectations regarding the level of student contact and support the DSPS counselor is able to provide to the student. Meeting weekly, at least for the first semester or two, is not uncommon. In fact, some students may require multiple meetings per week, especially during transition periods, change or stress as is the case at the beginning of a semester, midterms and finals (Wolf, Thierford Brown & Bork, 2009). If a student, however, is overly needy, comes in several times a week and is unable to make decisions without assistance, the DSPS counselor may need to set and maintain boundaries so that the student is able to develop individual problem solving skills and move towards independence and self-reliance.

Students with AS often come with family members that have a history of attending meetings and appointments with their child and who have been consulted with and notified of changes made to their child's program of study or educational plan, as stipulated in special education law governing K-12. Consequently, when their child enters higher education, the same level of contact, consultation and communication is often expected. DSPS counselors need to educate parents on the laws that govern students with disabilities in higher education and inform them of confidentiality issues and legal restrictions such as Federal Education Right to Privacy ACT (FERPA) that limit family involvement. DSPS counselors can in fact communicate with a parent or family member, but necessitates the student's written consent; without it, no communication can take place.

While most parents ultimately want their child to become self-sufficient and function independently, they nevertheless struggle with "backing off" and allowing their child the opportunity to become self-reliant and self-advocate. The transition to higher education and adulthood marks a new phase in their child's life and parents often face this stage with intense anxiety and concern. During this time of emotional distress, counselors need to listen to parents' fears, acknowledge their feelings and provide them with information about the support services available to help their child succeed. Building a respectful relationship and gaining their trust is essential to establishing a partnership that fosters the student's independence. Once this partnership is developed, DSPS counselors can establish guidelines and parameters regarding frequency of calls, meetings or emails and parents are more apt to cooperate.

Working with Faculty:

Professional counselors working in DSPS offices on college campuses play a key role in developing a collaborative learning environment between the students with AS and the instructional faculty teaching them. Consequently, it is essential that DSPS counselors cultivate a strong and respectful working relation with faculty and cease opportunities to provide professional development training on how to best support the educational success of this growing college student population.

In general, students with disabilities do not disclose the nature of their disability to faculty for fear of being viewed as "deficient" or singled out as "different." In fact, for many students with AS, there may be no need to disclose their disability nor is there a legal requirement obligating them to do so. As long as the student with AS is meeting the educational demands of the class and behaving and interacting in a socially acceptable manner, it may not be necessary to disclose the nature of their disability to the professor (Wolf, Thierford Brown & Bork, 2009). However, for some students with AS, disclosure is strongly recommended, particularly if the student exhibits odd behaviors or mannerisms, requests unusual or non-traditional accommodations or has had classroom issues in the past. For example, when a student with AS puts his

down on his desk, he is not disinterested, bored or sleeping but simply attempting to screen out or relieve unbearable sensory stimulation. Providing faculty with disability-related information enables them to understand certain behaviors rather than make erroneous conclusions or judgments about the student. This, in turn, affords the professor the opportunity to establish a positive instructional relationship with the student with AS as well as work together with the DSPS office in developing strategies that result in student retention and academic success.

The provision of academic accommodations and adjustments occurs with ease when faculty have an understanding of AS and the functional limitations that impact a specific student's optimum performance in an academic setting. In fact, researchers have found that "faculty cooperation in making adjustments, accommodating and supporting a student with AS in class is enhanced when the professor is given information about the condition in general and the student in particular" (Wolf, Thierford Brown & Bork, 2009, pg. 167). For example, a private testing environment is authorized to reduce or eliminate external distracters that interfere with attention and concentration abilities or extended time for testing is authorized because of slow processing speed. However, because students with AS experience social interaction difficulties, they struggle with the ability to communicate their needs to faculty and provide rationalizations and justifications for accommodations. Here is where the DSPS counselor can intervene and offer faculty the clarification and understanding they may need to feel comfortable and confident in permitting the legally mandated adjustments. Some faculty, however, may perceive accommodations as affording the student with AS with an unfair advantage as compared to the rest of the students in the class. Counselors need to assure concerned faculty members that accommodations are authorized to enable the student with AS *equal access* to educational opportunities; in other words, academic adjustments are designed to "level the playing field" for students with disabilities. Further, accommodations may not fundamentally alter the program of study; "students with AS must be evaluated by the same standard as other students in the class

and that accommodations (even unusual ones) do not mean that the course standards should be changed" (Wolf, Thierford Brown & Bork, 2009, pg. 166).

Partnering with faculty and establishing a cooperative and collaborative working relationship early on in the semester establishes the foundation for increased academic and social success for the student with AS. Counselors need to communicate with faculty that their role is not only to advocate for the student with a disability, but to also provide support to the faculty member as they explore methods of successful interaction and strategies that lead to academic success for the student with AS. It is also important for counselors to remember that faculty work best with students with AS when they are treated with respect and conferred with as informed colleagues, "and not when they feel they are given commands about how to run their classroom" (Wolf, Thierford Brown & Bork, 2009, pg.168).

Conclusion:

Supporting college students with AS requires knowledge and understanding of the clinical features that define the diagnosis and how they impact an individual's ability to succeed in an academic environment. Students with AS are markedly increasing on college campuses and the more knowledgeable professionals working in higher education become, the more equipped they will be to influence and aid in student success and retention. Collaboration, however, among the student, family member, DSPS counselor and faculty is critical for the student with AS to be effectively supported and succeed both academically and socially.

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Appendix A

Getting to Know Your Student

- Sample Intake Questionnaire for Students
- My Areas of Difficulty Checklist
- My Stress Tolerence
- Stress Thermometer
- 20 Questions Stress Test
- Identifying My Academic Strengths and Weaknesses
- Student Accommodations Needs

Wolf, L. E., Thierfeld Brown, J. & Bork, R. (2009). *Students with Asperger Syndrome: A Guide for College Personnel.* Shawnee Mission: Autism Asperger Publishing Company, 271-293.

Sample Intake Questionnaire for Students

In an effort to anticipate your needs at college, please complete this form to the best of your ability prior to our appointment. Feel free to ask your parents or other people who know you well to assist. Please provide as much information as possible, so that we can get a better understanding of how we can help you be successful in college. Please bring a copy of the form with you, and also mail or fax to:

[Put campus contact information here]

General Information:

Today's date: _____

Your full name: _____

Your age: _____

Your birthday: _____

Your home address (street, city, state, zip code): _____

Your phone: _____

Your e-mail: _____

Parent contact information (name, address, phone, email): _____

Do we have your permission to contact your parents? _____

(If yes, ask student to sign appropriate release form)

Did anyone help with this form? _____

Who? _____

Educational Background:

Where did you go to high school? _____

Year graduated? _____

Diploma or GED? _____

ACT or SAT Scores: Verbal, Quantitative, Writing_____

Advanced Placement courses and test scores: _____

Were you in special education? _____

If so please describe services received

and for how long _____

Guidance counselor name, address, and phone number_____

Do we have your permission to speak with this individual? _____

[If yes, ask student to complete appropriate release] _____

Other colleges you attended

College or program (name and address)_____

Dates attended_____

Degrees or certificates received _____

Current School Information:

College or university attending:_____

City and state: _____

Student ID number: _____

School or degree program:_____

Current major:_____

Year (circle one): High School Freshman Sophomore Junior Senior Grad Professional Nonmatriculated

Academic standing (circle one):

Good

Academic Warning

Probation

Suspension

Academic advisor's name: _____

Advisor's phone/e-mail: _____

Do we have your permission to speak with this individual? _____

[If yes, ask student to complete appropriate release]

Campus Life Information:

On-Campus Residents

Do you live on campus now? If so, we would like to know where and with whom: _____

Name of residence hall: _____

Single room? _____

Suite? How many suite mates? _____

With roommate? _____ How many? _____

How are you getting along with your roommate(s)? _____

Off-Campus Residents

With parents at home? _____

With other family member? _____ With whom? _____

Off campus apartment? Shared or alone? _____

Other (such as group home) _____

Please tell us about your lifestyle and habits (privacy needs, personal space needs, neatness, etc.). _____

_____

_____

_____

_____

Are you having any difficulties with your living arrangements? ___

Dining:

Are you on a meal plan? _____ Which one? _____

Do you know where the dining halls are for your residence?_____

Please tell us about your food preferences or needs. _____

_____

_____

_____

Do you follow any specific diet? _____

Do you have strong food likes and dislikes?_____

Student Activities:

Are you a member of any groups on campus? _____

If so, which ones? _____

What is your role in these groups? _____

Would you like help in locating groups and activities? _____

Tutoring:

Do you have tutors for your academic subjects? If so, which subjects and from where?_____

Do you need help in locating tutors? _____

Do you use academic support centers on campus? _____

Which ones?_____

Would you like help in locating appropriate resources? _____

Judicial or Disciplinary Actions:

Are you involved in any judicial actions now or in the past? _____

Are you aware of any situations that make you uncomfortable such as bullying or drug use that you would like to discuss with someone? _____

Personal Care:

Have you located the laundry rooms? _____

Do you know how to use the machines? _____

Are you comfortable with the washroom facilities in your residence? _____

Do you know where the public phones are for your hall? _____

Do you know your important phone numbers? _____

Doctor? _____

Parents? _____

Transportation:

How do you plan to get to and around campus? _____

Do you get lost easily? _____

Will you need help? _____

Walk:

Do you know the route between your residence and the academic buildings? _____

Are you O.K. walking at night? _____

Bicycle:

Do you know where the bike racks are on campus or in your residence hall? _____

Do you have a chain and lock? _____

Car:

Do you have a car? _____

A driver's license? _____

A carpool? _____

Public Transportation:

Bus? _____

Subway/train? _____

Campus shuttle? _____

Are you familiar with the local public transportation system? ____

Health and Disability Information:

Please tell us about your main disability _____

_____

_____

_____

When you were first diagnosed with this condition? _____

When was your latest assessment? _____

By whom? _____ (Please attach reports)

Please describe your condition and how it affects you

At home? _____

At work? _____

At school? _____

With friends? _____

Do you have any other health issues or medical conditions? ____

Have you ever seen a medical doctor about this or another condition? _____

Have you been treated for a psychological disorder such as anxiety or depression? If yes, please provide details _____

_____

_____

_____

_____

Diagnosis? Treatment plan? Medications? Duration of treatment? Continuing symptoms? _____

Name of physician or therapist (name, address, phone)

_____

_____

Do we have permission to speak with this individual? _____

[If yes, ask student to sign appropriate release]

Medications taken _____

Side effects _____

Do you have a current prescription? _____

Do you know how to take your medications? _____

Would you like to understand more about your conditions and how they affect you? _____

Have you used accommodations in school in the past? If so, please list them below

_____

_____

_____

Will you be requesting any accommodators at this school? If so, please list them

_____

_____

_____

Please make sure you or your parents sent all current documentation of your disability to the Office of Disability Services at the following address:

[Mailing address here]

Personal Strengths, Weaknesses and Goals:

My best subjects and skills are:_____

My areas of special interest and talent are: _____

My goals for this semester are: _____

My long range goals are: _____

I really need a lot of help with: _____

_____

_____

_____

From Wolf, L. E., & Thierfeld Brown, J. (2008). Strategic education for students with Asperger Syndrome (SEADS). Program materials in development. Adapted with permission from L. Legere, A. Sullivan Soydan, & L. E. Wolf (Eds.), *Boston University Office of Disability Services: Supported education intern manual.*

My Areas of Difficulty Checklist

The following is a list of some areas of difficulty experienced by many students with ASD. It is helpful to identify problems so that we can better understand you and make the best recommendations for you. Please check all of the statements that apply to you.

Learning & Memory

- ☐ New assignments are confusing
- ☐ I can't make decisions
- ☐ I don't have enough energy to start things
- ☐ I only like to study things that are interesting to me
- ☐ I have difficulty remembering instructions unless I write them down
- ☐ I get overwhelmed in class or when studying
- ☐ Sometimes my mind goes blank during exams
- ☐ I have a lot of memory problems
- ☐ I have trouble taking notes in class
- ☐ I don't have good study habits

Attention and Organization

- ☐ Sometimes I can't concentrate
- ☐ Little things get me distracted
- ☐ I have trouble getting started on things
- ☐ My room and notes are really disorganized
- ☐ I need to move around when I have to sit still
- ☐ I never plan my work in advance
- ☐ I don't have enough time to do everything I need to
- ☐ Deadlines make me panicky
- ☐ I start a lot of projects that I don't finish
- ☐ I only like to do one thing at a time

Communication Skills

- ☐ Sometimes I speak too softly
- ☐ I hate small talk like at parties
- ☐ I don't answer questions or say one or two words
- ☐ It is hard to listen to and understand people
- ☐ I don't like to look people in the eyes
- ☐ Sometimes I talk too loud or too high
- ☐ I am very hard to interrupt
- ☐ I only talk about things that interest me
- ☐ Some people say my voice sounds funny
- ☐ I sometimes stand too close when talking to others
- ☐ It is hard for me to start or join a conversation
- ☐ I'm boring to talk to

Behavior

- ☐ I start many things before thinking
- ☐ I need to fidget or pace
- ☐ People sometimes look at me funny
- ☐ I like to do things the same way every time
- ☐ Sometimes my behaviors seem unusual to others.
- ☐ I spend too much time online instead of studying.
- ☐ I can't relax because I am so stressed.
- ☐ I need to have something in my hands to stay focused
- ☐ I have the same idea over and over again
- ☐ I get upset when things unexpectedly change

Interpersonal Skills

- ☐ I don't like to talk to kids at school
- ☐ I don't know how to act when people come up to me
- ☐ Making friends seems really difficult to me
- ☐ I don't know how to ask someone for a date
- ☐ I just don't understand what makes other people tick
- ☐ I don't have any friends at school
- ☐ Group projects are awful – I prefer to work by myself
- ☐ It is difficult for me to ask for help.
- ☐ I tend to stay away from people at school
- ☐ I have always been rejected at school
- ☐ I like to eat by myself
- ☐ All the activity in school gets me too stimulated

Sensory

- ☐ Sometimes voices get too loud for my ears
- ☐ Being too close to other people makes me jumpy
- ☐ I only like to wear certain clothes
- ☐ I am very sensitive to heat or cold
- ☐ Things that rotate are fascinating to me
- ☐ I need to look at things to understand them
- ☐ I get lost and don't remember how to get around places
- ☐ Being touched by someone is really uncomfortable
- ☐ I get stressed in noisy places
- ☐ I avoid people who wear certain perfumes
- ☐ I wish I had a private bathroom

Emotions

- ☐ I feel too nervous to stay in school
- ☐ I get really afraid of people, places, or activities
- ☐ People tell me I over react to little things
- ☐ I am too afraid to talk to my teachers
- ☐ Even when I get good grades, I worry about failing
- ☐ I get down or blue a lot
- ☐ I cry all the time
- ☐ I get panic attacks
- ☐ I need to be alone
- ☐ Sometimes I get over-excited

Wellness and Self-Care

- ☐ I don't take the medicines my doctor prescribes
- ☐ At times, I don't eat very well
- ☐ I don't sleep as much as I need
- ☐ I sleep too much
- ☐ I forget things like laundry or showers
- ☐ I don't exercise or do any physical fitness activities
- ☐ Sometimes I work long hours and don't take any breaks
- ☐ I don't know how to get to a doctor when I am sick
- ☐ When I see a doctor I don't know what to tell them
- ☐ I forget to clean my room
- ☐ I don't know where or how to get my medications

Campus Resource Needs

- ☐ I don't know how to get accommodations
- ☐ I can't get a meeting with an academic advisor
- ☐ I don't have a quiet place to study
- ☐ I can't find a tutor or academic coach
- ☐ I have problems with my financial aid
- ☐ I have housing problems
- ☐ I don't have a local doctor or therapist
- ☐ I don't have transportation to school
- ☐ I don't have enough money for books and supplies

From Wolf, L. E., & Thierfeld Brown, J. (2008). Strategic education for students with Asperger Syndrome (SEADS). Program materials in development. Adapted with permission from L. Legere, A. Sullivan Soydan, & L. E. Wolf (Eds.), *Boston University Office of Disability Services: Supported education intern manual.* Copyright 2004, Trustees of Boston University.

My Stress Tolerance

Everyone has their own individual level of comfort, and different things affect us all differently. Some people get easily stressed or annoyed, and others don't react much. We are interested in learning about situations where you might get stressed or nervous and what tings have helped you deal with these reactions.

Please tell us about particular situations that stress you out.

Please tell us how you react or what do you do to cope when you get very:

Fearful

Angry

Frustrated

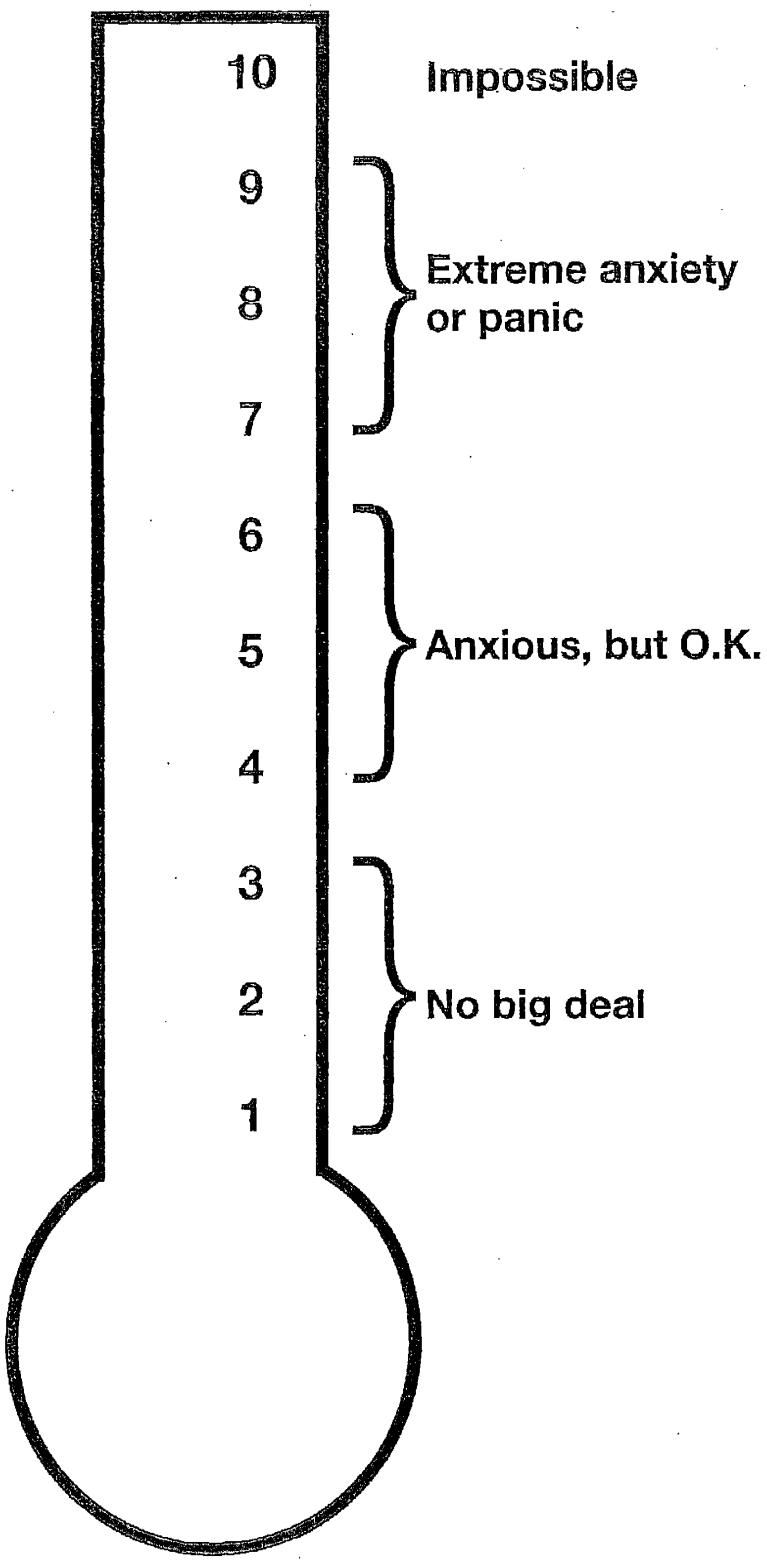
Confused

Do you use fidgets, comfort objects, or repetitive behaviors to reduce your stress or anxiety? If so, please describe.

Please use the Stress Thermometer (see page 286) to rate the following examples of day-to-day changes you may encounter as a student, based on your ability to manage the stress it may cause you.

Please also tell us more about specific things you might do in each of those situations.

Stress Thermometer



20 Questions Stress Test

		Rating	How would I cope?
1	The seat you usually sit in is taken when you get to class.		
2	The professor has left a note on the classroom door explaining that class will be held in an alternative building today.		
3	You are called upon in class to discuss a reading or answer a question.		
4	The bookstore does not have the book you need when you arrive to purchase it.		
5	Your professor announces a pop quiz when you enter the room.		
6	Your roommate has eaten something that was in the refrigerator that belonged to you.		
7	The bus you are riding forgets to stop at your stop to let you off.		
8	You must walk through a very crowded hallway every time you need to get to your classroom or dorm room.		
9	The professor wants to see you about your paper.		
10	Your roommate has left dirty clothes on your side of the room.		
11	Your roommate has left a note on the door explaining that he/she has a guest and you can't come in.		
12	Your RA tells you there have been complaints about you.		
13	They are out of the only foods you like when you get to the dining hall.		
14	The electricity goes off in your residence hall during a storm.		
15	You are locked out of your room because you forgot to bring your keycard.		
16	You misplaced your book bag with all of your homework in it.		
17	The student down the hall turns up his stereo full blast after you have gone to bed.		
18	There are no stalls available when you planned to take a shower.		
19	The fire alarm goes off unexpectedly.		
20	You need to choose a lab partner.		

Identifying My Academic Strengths and Weaknesses

Academic Domain	Activity	Strength	Needs Help
Registration	Knowing what to take		
	Choosing classes		
	Fitting my schedule		
	Behavior in classes		
Accommodations	Identifying needs		
	Gathering documentation		
	Going to Disability Services		
	Disclosing to faculty		
	Asking for accommodations		
	Using my accommodations		
In Class	Being on time		
	Attending classes		
	Asking or answering questions		
	Taking notes		
	Asking for help		
	Sitting still		
	Paying attention		
	Sensory symptoms		
	Unusual behaviors		
	Interrupting		
Homework	Understanding homework		
	Gathering materials		
	Following instructions		
	Organizing and prioritizing		
	Scheduling time		
	Finding space		
	Finishing homework		
	Handing in homework		

Academic Domain	Activity	Strength	Needs Help
Studying	Making a study plan		
	Finding time to study		
	Finding study group or partner		
	Finding/managing study space		
	Handling distractions		
	Staying motivated		
Writing	Outlining		
	Researching		
	Composing		
	Editing (grammar, spelling, etc)		
	Clarifying topic (with professor)		
	Finding help		
	Finishing papers		
	Handing papers in		
	Needing it to be perfect		
Reading	Understanding text		
	Too much to read		
	Lose track of what reading		
	Integrating readings		
Dealing with Peers	Feeling shy		
	Introducing myself		
	Starting a conversation		
	Looking at people		
	Sitting next to people		
	Working in groups		
	Talking to peers		

Academic Domain	Activity	Strength	Needs Help
Dealing wth Peers	Finding people to dine with		
	Afraid of people		
	Soaring people		
	Tone of voice		
Dealing with Professors	Asking for meetings		
	Getting feedback		
	Disclosing disability		
	Asking for help		
	Asking for accommodations		
	Speaking on the phone		
	Clarifying assignments		
	Negotiating accommodations		
	Making eye contact		
	Speaking up for self		
	Planning for follow-up		
Residence Life	Sharing living space		
	Coordinating with roommates		
	Negotiating		
	Resolving conflicts		
	Noise		
	Managing belongings		
	Doing laundry		
	Personal hygiene		
Other	Seeking medical assistance		
	Navigating campus		

From Wolf, L. E., & Thierfeld Brown, J. (2008). Strategic education for students with Asperger Syndrome (SEADS). Program materials in development. Adapted with permission from L. Legere, A. Sullivan Soydan, & L. E. Wolf (Eds.), *Boston University Office of Disability Services: Supported education intern manual.*

Student Accommodations Needs

(To complete, please get information from
My Areas of Difficulty Checklist)

Problem Areas (see form)	Possible Accommodations
Learning and Memory	
Attention and Organization	
Communication Skills	
Behavior	
Interpersonal	
Sensory Skills	
Emotions	
Wellness and Self-Care	
Campus Resource Needs	

From Wolf, L. E., & Thierfeld Brown, J. (2008). Strategic education for students with Asperger Syndrome (SEADS). Program materials in development. Adapted with permission from L. Legere, A. Sullivan Soydan, & L. E. Wolf (Eds.), *Boston University Office of Disability Services: Supported education intern manual.* Copyright 2004, Trustees of Boston University.

Appendix B

Template for Identifying Functional Limitations, Accommodations and Strategies and Resources

- Academic Skills – Part 1
- Life Skills Development – Part 2

Bedrossian, L. E. & Pennamon, R. E. (2007). *College Students with Asperger Syndrome: Practical Strategies for Academic and Social Success.* Horsham: LRP Publications, 89-94.

Name: John Q. Student
I.D. #: 999-99-9999

Academic Skills - Part I

Functional limitations	Accommodation(s)	Strategies/Resources
Visual Processing: • Perceives detail, not Gestalt • Poor facial recognition • Visual stimuli overload	• Extended testing time for organizing visual detail into a "whole" • Distraction-reduced testing environment • Note-taker in class • Use of audio recorder in class • Priority classroom seating	• Use examples of how part relates to whole • Use names of people present • Place of calm/sanctuary available • Hired or volunteer "buddy" for social situations
Auditory Processing/ Receptive language/Auditory Stimuli: • Slow processing • Problems with reciprocal social/conversational interaction • Difficulty with language interpretation • Perceives detail, not Gestalt • Poor processing of verbal cues such as voice inflection • Auditory stimuli overload	• Extended testing time • Distraction-reduced testing environment • Note-taker in class • Use of audio recorder in class • Copies of instructor class notes/PowerPoint presentations, where available (preferably in advance) • Written instructions (e.g., course syllabus, project and test instructions) • Advance alert to prepare for classroom participation • Consideration of alternative to class presentations	• Use of audio recorder outside class, as needed • Place of calm/sanctuary available • Written directions • Use of e-mail for information exchange • Clarification of instructions/information • Hired or volunteer "buddy" for social situations • Consideration when assigning student to a group for class projects • Possible alternative for presentations project
Expressive Language: • Delayed/slow verbal responses	• Extended testing time • Consideration of alternative to class	• Hired or volunteer "buddy" to cue or interpret verbal exchanges

◦ Poor voice modulation ◦ Repetitive, often verbose conversational style • Inability to interpret listener cues and adjust verbal output	presentations ◦ Advance alert to prepare for classroom participation • Extended testing time ◦ Use of organizational software such as Inspiration	• Advance information for instructors • Establish "rules" of classroom behavior in advance with student • Behavioral contracts for verbal interaction in the classroom
Abstract Reasoning/Analytic Thinking: ◦ Difficulty with abstract language interpretation ◦ Linear thinking ◦ Inflexible thinking	◦ Extended test time ◦ Note-taker • Audio recorder • Copies of instructor class notes/PowerPoint presentations, where available (preferably in advance)	• Use of concrete examples • Converting information to visual format • Use of tutorial services available • Small study group participation • Tutoring
Organization/Sequencing: ◦ Difficulty with overviews/Gestalt, ◦ Perspective fixated on details ◦ Predominantly linear thinking ◦ Difficulty planning and shifting cognitive perspective	◦ Extended test time • Use of computer for writing • Use of organizing software (Inspiration) • Classroom note-taker	• Use of coaching services for planning/prioritizing • Use of portable calendar/planner with important dates highlighted • Priority task list • Reading strategies for main ideas • Color coding (information, household and personal items) ◦ Use of visual organizing strategies • Assistance developing categories for sorting information/material items • Coaching for organizational strategies & implementation
Processing Speed (especially auditory processing): ◦ Slow processing speed for receptive communication, especially auditory ◦ Slow response speed, especially verbal expressive ◦ Difficulty with abstract information ◦ Perspective fixated on details ◦ Sensory distractions/	◦ Extended testing time ◦ Advance alert for classroom participation preparation • Use of audio recorder ◦ Use of classroom note-taker ◦ Distraction-reduced testing environment	◦ Information/alert regarding difficulties in auditory processing for professors ◦ Reviewing classroom lecture information in advance ◦ Use of white-noise device or headphones • Lowered course load ◦ Tutor ▪ Use of headphones/white noise machine while studying ◦ Use of visual study tools

interference		
Motor Difficulties: ▪ Difficulty with handwriting ▪ Poor gross motor skills	▪ Use of a computer for writing (keyboard or voice dictation) ▪ Note-taker in class ▪ Audio recorder in class	▪ Use of a computer for writing tasks ▪ Careful consideration for any Physical Education requirements
Getting Started/Initiating: ▪ Preference for sameness/predictability ▪ Difficulty with organizing ▪ Poor impulse control ▪ Difficulty with planning and shifting ▪ Inflexible ▪ Problems with information/stimulus overload/meltdowns	▪ Extended testing time ▪ Distraction-reduced testing environment ▪ Use of organizational software for tests ▪ Distraction-reduced testing environment	▪ Establishing interim deadlines for tasks ▪ Establishing activity plan for long-term tasks ▪ Breaking tasks into smaller segments ▪ Warning of changes to be made in expected process, plan ▪ Clear directions for academic tasks and deadlines ▪ Coach/helper to assist with keeping on track
General Sensory Sensitivity: ▪ Auditory ▪ Visual ▪ Tactile ▪ Olfactory	▪ Extended testing time ▪ Distraction-reduced testing environment ▪ Note-taker in class ▪ Audio recorder in class ▪ Priority classroom seating	▪ Distraction-reduced study area
Attention/Concentration: ▪ Sensory overload ▪ Tendency to fixate on details ▪ Preoccupation on parts ▪ Preoccupied with specific topics of interest or complex process	▪ Priority Registration (allowing for extended time testing, selection of classroom/ professors, etc.) ▪ Extended testing time ▪ Distraction-reduced testing environment	▪ Place of calm/sanctuary available ▪ Use of white noise machine or headphones ▪ Study partner/helper to encourage staying on track

Name: John Q. Student
I.D. #: 999-99-9999

Life Skills Development - Part II*

Functional limitations	Helpful Interventions/Actions by Others*	Strategies/Resources
Speaking/communicating: • Sometimes slow and robotic-like speech pattern • May ask repetitive questions • Egocentric conversational style (i.e., may have a large vocabulary) • Difficulty talking with others (e.g., professor, roommate) • Not knowing when to ask appropriate questions or initiate contact for help • Difficulty understanding meanings	• Provide opportunities (e.g., meetings) for the student to interact and become familiar with new people • Summarize information that has been verbally discussed with the student • Provide written feedback to the student • Role play with student how they might communicate in a particular situation • Limit number of questions that the student should ask by developing a rule to follow • Redirect the student back to the topic when needed • Allow student sufficient time to respond to a question; give prompts when needed	• Student should ask clarifying questions when unsure • Student should develop a list of questions to ask in various situations and a script to follow • The student can use e-mail to communicate with others or determine best form of communication for themselves
Activities of daily living: • Poor self-help skills • Poor domestic skills • Difficulty managing personal	• Provide written guidelines • Furnish a list of strategies • Give training and preparation where needed • Provide a list of rules	• The student can hire a coach or personal assistant • Student should develop a resource notebook with contact information and financial information (e.g., banking, ATM)

business • Poor living-community skills • Difficulty acquiring higher-level adaptive skills	• Introduce to campus resources (e.g., counseling, residence advisors) • Provide opportunities to develop independent living skills • Provide directions for daily routines • Prepare a list of resources on and off campus • Provide on- and off-campus maps and opportunities to become familiar with campus • Teach budgeting skills • Teach self-sufficiency skills through repeated rehearsal • Explore problem solving techniques with student	• Student should develop a checklist/to-do list
Deficient coping skills: • Dealing with choice situations, changes in schedules and surprise situations • Emotional issues (e.g., anxiety, anger)	• Provide opportunities to relieve stress and a quiet, safe place when student becomes overwhelmed • Provide directions for calming down in a distressing situation • Develop strategies for self-calming • Provide routine and predictability • Provide a list with limited choices • Provide drug therapy when needed • Teach the link between anxiety provoking experiences in a concrete fashion as an insight into their feelings • Teach specific problem-solving strategies to address frequently occurring situations	• Link with counselor/therapist • Establish/maintain contact with health care providers • Participate in health/wellness activities • Promote work/life balance • Enroll in an anger management techniques/class if needed
Poor organizational/management skills (executive functioning): • Overcommitment • Inability to initiate, perform, and generalize tasks (e.g., sequencing abilities)	• Provide step-by step directions • Develop a list of who to go to for help • Encourage regularly scheduled appointments with various resource personnel (e.g., disability services provider, instructor, counselor)	• Examine time commitments and cut back where possible • Eliminate or reduce sensory distractions that interfere with concentration • Build in time for various activities • Utilize a notebook, planner and calendar

◦ Inability to stay focused, retain information in working memory and understand expectations ◦ Organizational problems (missing deadlines)	• Provide frequent reminders	◦ Develop color-coded folders of tasks, etc. • Develop work systems that provide clear, direct, visual, and concrete methods • Utilize timers and alarm clock when needed • Organize desk with a specific place for papers, pens, books ◦ Use labels for materials • Develop work/organizational systems that provide clear, direct, visual and concrete information ◦ Utilize a daily schedule
Social impairment: ◦ Failure to develop relationships ◦ Inappropriate approaches to others ◦ Poor nonverbal communication ◦ Limited ability to express empathy ◦ Difficulty with social rules ◦ Poor peer relations ◦ Problems with understanding another's perspective ◦ Difficulty understanding what is important	• Develop social stories (scripts) that describe a situation, skill or concept ◦ Provide a list of leisure time activities, clubs and organizations ◦ Provide a list of upcoming social events ◦ Offer opportunities to cultivate social awareness ◦ Link student with a mentor and/or "buddy" ◦ Offer opportunities for social interaction ◦ Facilitate social situations and activities in which leadership roles can be developed and demonstrated	◦ Build social contacts around common interest or activity • Prepare and practice so that a positive result is the outcome when taking on leadership responsibilities
Self-advocacy: ◦ Lack of understanding regarding personal needs ◦ Difficulty initiating action ◦ Poor problem solving strategies ◦ Poor negotiation skills	• Teach self-esteem skills ◦ Teach student the steps to follow when faced with a problem that needs solving	• Look for opportunities to acquire a more positive self-concept • Ask questions when unsure

*Accommodations are typically not mandated for Life Skills Development, but other interventions are helpful to student success.

Appendix C

Helpful Websites

www.AspenNJ.org
Asperger Syndrome Education Network (ASPEN)

www.aspergersyndrome.org
OASIS (On-line Asperger Syndrome Information Service)

www.autism.com/ari
Autism Research Institute

www.autism-society.org
Autism Society of America

www.autismspeaks.org
Autism Speaks

www.autismtoday.com
Autism Today

www.cdc.gov
Centers for Disease Control and Prevention

www.tonyattwood.com.au
Tony Attwood

www.cns.dircon.co.uk/index.html
University Students with Autism and Asperger's Syndrome