Working with Students on the Autism Spectrum

A guide for college faculty and staff

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In April of 2016, the lead article in *The Economist* was entitled, “Beautiful minds, wasted: How to deal with autism.” Without reading the article, it’s possible to interpret the title in a negative light: that people with autism lack potential. However, we are the ones lacking in understanding. What the article discusses is how society’s knowledge gap about autism leads to missed opportunities—*for the rest of us*. People with autism do face many challenges, but they have much to offer. It is my hope that this resource will help you better understand the specific strengths and needs of college students with autism. Together, we can help them maximize their potential.

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Introduction

Over the next decade, more than 500,000 young people with autism will transition into adulthood. About 45% of this group will enroll in a university, college, or technical/vocational school during this time (Scott, Hart, & Volkmar, 2018). The college environment brings new challenges for many of these young people, who may need any of a wide range of support options. However, a college degree is a strong predictor of positive outcomes for people with autism in adulthood, such as finding employment and living independently without public assistance. Yet compared to students from the typical population (52.4%), students with autism have a lower graduation rate (38.8%; Scott, Hart, & Volkmar, 2018).

This points to a need for strategies to help these students succeed. Many such students will benefit from accommodations for learning that are granted and managed by the college's office of disability or accessibility services. Students will also benefit from having faculty who are aware of their unique challenges and are ready to work together with the student to create a successful learning environment.

This manual is intended to give faculty and staff a working knowledge of Autism Spectrum Disorder. It is my hope that you will gain the following:

- A general understanding of the characteristics of Autism Spectrum Disorders
- Basic strategies for addressing issues that may arise in the classroom for students with autism
- A general understanding of specific accommodations that may be granted to students with autism.

Case Examples

To give you an example of the diversity of symptoms in people with autism, let's take a look at the following 5 individuals:

Jaquan, age 22, lives at home with his mother. He is polite and friendly to adults but has a long history of being bullied by peers and does not have any peer friendships. He tends to speak rapidly, making it difficult to follow his train of thought at times. Jaquan has three topics of conversation that he prefers above all others: Pokémon, ecology, and Greek and Roman mythology. If he is not directly asked to change the subject, he will talk extensively on these topics without realizing that his listener is uninterested. Jaquan is in his freshman year of community college, but reports feeling isolated and wants to quit, stating that no one understands him or supports him. Jaquan is diagnosed with autism.

Steven, age 18, is diagnosed with Down syndrome, a genetic disorder that affects all aspects of his development. Steven does not talk and points to pictures to communicate. Currently, he has 12 pictures of wants and needs on his iPad. He has a range of sports videos he enjoys on his iPad, but prefers to watch them alone in his room, rewinding to watch the same scenes repeatedly. Steven is in a special education school for students with intellectual disabilities where he receives pre-vocational training. Steven also has the diagnosis of autism.

Karl is a 16-year-old who lives at home with his parents and siblings. Karl attends a magnet high school for students who are intellectually gifted. He has various interests, including economics and biomedical engineering; he is also a talented writer. Karl has dyspraxia resulting in difficulties with motor skills: he cannot hold a pencil, dress independently, or speak. He communicates by typing with one finger on a computer keyboard. It takes him longer to complete assignments, but he is very conscientious of deadlines and becomes anxious if his work might be late. Karl has email pen pals and a circle of friends at his school. Karl is also diagnosed with autism.

Maria is a 17-year-old who lives at home with her parents. Maria speaks to her parents in 2- to 4-word sentences but will only talk in a whisper at school. She is in a self-contained classroom in her local high school for most of the day, where she completes schoolwork at a 3rd to 4th grade level. She is in art and physical education classes with her fellow high school juniors. Maria is gifted in art, and draws with expert precision and detail, favoring animals as her subject matter. She has won several art competitions throughout her school years and accolades from professional artists. Maria is also diagnosed with autism.

Jasmine is a 20-year-old college sophomore. She lives on campus (although she reports not getting along with her roommate) and is majoring in computer science; she has a GPA of 3.9. Jasmine has no difficulty completing her assignments, though

she appears very anxious in class. Before class starts, she can be seen rubbing her thighs and arms repeatedly and rapidly. During class, she raises her hand after every question the professor asks. Sometimes, other students in the back roll their eyes or snicker in response to Jasmine's behavior. The professor has given feedback to Jasmine, praising her enthusiasm and mastery of the material, but encouraging her to give her peers a chance to respond to questions. The professor has also spoken privately to the other students about their inappropriate responses. Jasmine is also diagnosed with autism.

Which of these individuals would be most successful in college? Take some time to think about it. We will revisit these 5 people at the end of this manual.

What is Autism Spectrum Disorder?

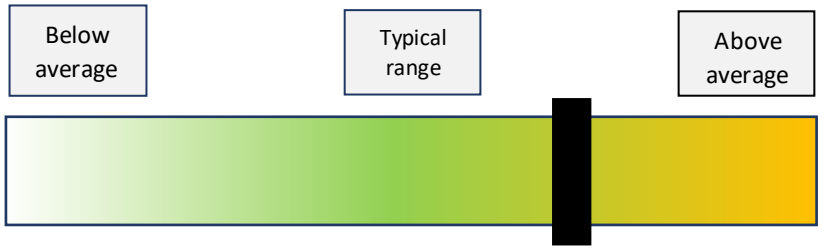
Autism is formally referred to as Autism Spectrum Disorder, or ASD. The word, "spectrum" is important, because one of the few consistencies of ASD is its inconsistency: it presents differently across different people. There is a saying in the autism community (generally attributed to Stephen Shore): "If you've met one person with autism, you've met one person with autism." For example, some people with ASD are acutely sensitive to environmental stimulation such as sights, sounds, and smells; others may not appear to notice a blaring fire alarm. Some individuals are intellectually gifted while others may be intellectually delayed. Some communicate fluently, some may have unusual characteristics to their speech, and some may be unable to speak and require other methods of communication. Hence, the "spectrum" within Autism Spectrum Disorder.

We use the idea of a spectrum to explain the different degrees of intensity with which symptoms present. This is not unique to autism: many human characteristics present in different degrees in different people. Intelligence, language ability, and athletic ability are just some examples. The Centers for Disease Control have used a model of

multiple spectra to better explain the diversity with which autism is seen in different individuals. These varying degrees of symptoms are best described by two types of spectra.

One spectrum is a continuum between the **absence** and **presence** of a characteristic. A person may lack the characteristic, have the characteristic, or fall anywhere in between (as demonstrated by the black line in the diagram below). The ability to walk independently is on this type of spectrum.

A second type of spectrum includes not just the absence or presence, but the **excess** of a characteristic. A person may lack the characteristic, have more than the usual amount of the characteristic, or have the characteristic to a typical degree. Intelligence is a trait that is on this type of spectrum.



Characteristics of ASD

The two spectrum models on the previous page can be used to describe each of the five general domains potentially impacted by autism:

- Communication
- Social interaction
- Sensory response
- Repetitive behaviors, and
- Motor skills.

Let's start by looking at communication.

Communication

As you can see in the diagram above, people with autism can fall anywhere on the spectrum of speaking to nonspeaking. Those who are not able to speak may use any of several alternative communication strategies, such as typing, sign language, handing over picture cards, or pointing to pictures (often on a tablet computer). Yet those who do speak may show any number of atypical characteristics in their use of language. These include:

- Speaking in a monotone
- Speaking too quickly, or "pressured" speech
- Using unusual phrasing (e.g., "Why you didn't do that?")
- Speaking too loudly or too softly
- Not understanding humor, sarcasm, or irony
- Interpreting metaphors literally
- Difficulties understanding analogies
- Speaking at length about preferred topics regardless of listener interest

Some of these characteristics can be readily addressed with accommodations, while others may simply necessitate prompting and reminders for the student. For example, students who experience anxiety over public speaking or who have a language disorder may be given the opportunity to read their presentations. A student may also benefit from drafting a presentation and reviewing it with Writing Center staff for feedback on language use. A student with a tendency to interrupt during class discussions would benefit from individual professor feedback (see p. 18 for how to give feedback). A mutually agreed upon signal (such as the professor raising two fingers) can be used afterwards in class to remind the student to wait for the appropriate moment to add their contribution to the discussion. A student who does raise their hand appropriately in

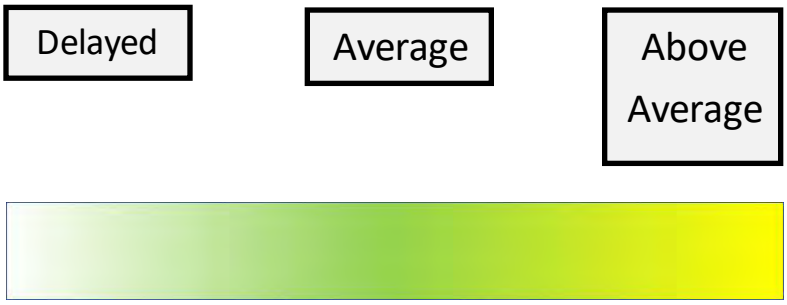
class but who does so at every available opportunity may also need an individual discussion with the professor to agree upon the number of times per class period that he or she should raise his/her hand (see p. 18).

Note: The previous examples (and those later in this manual) are possible scenarios you may encounter, but if you have any questions or concerns regarding the most appropriate or feasible strategy for a specific student, please contact your college's office for students with disabilities.

It is important to note that communication challenges can be present in students of all intellectual abilities. Students of average or above average intelligence can present with any or all of the characteristics listed above. Similarly, students who do not have the ability to speak may be of average or higher intelligence.

Let's look at intelligence more closely.

Intelligence

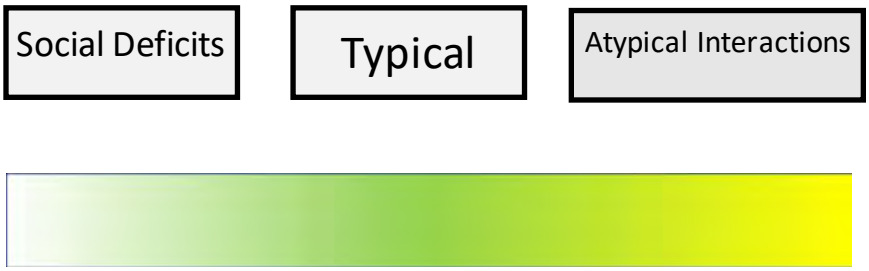


Intelligence in people with autism can range from intellectually delayed, to average, to above average/gifted, just as in the general population. However, many people with autism have *unique and variable profiles* when it comes to the different domains of intelligence. You may already know that intelligence is not a single construct, but an aggregate measure of a range of cognitive abilities (e.g., vocabulary, general knowledge, memory, visual perception, etc.). A person with autism may have a diverse cognitive profile; for example, strong visual memory but poor auditory memory, large vocabulary but difficulty writing on abstract topics, and so forth.

On campus, the office of disability services offers accommodations to students so that the negative impact of specific areas of challenge can be mitigated. Accommodations "level the playing field", so to speak. For example, the person with poor auditory memory may need to hear a lecture a few times before learning the content and may benefit from recording lectures. The student with challenges in writing may need regular appointments with the a writing tutor. The office of disability services coordinates a range of accommodations to address challenges faced by students with both autism and other disabilities. They also ensure that students with disabilities have the capacity to succeed with a college workload.

Some students with autism have their greatest challenges in other domains. One major hurdle is the intricate web of social interactions in the college environment.

Social Interaction



Social Deficits

- May not express a full range of emotions
- Social/performance anxiety (e.g., fear of interacting with others, fear of public speaking
- Lack of affect appropriate to the situation (e.g., frequent blank stare)
- Doesn't read body language
- Unaware of social rules

Atypical Interactions

- May show affect inappropriate to the situation (e.g., laughing out of nervousness during somber movie)
- May repeat words or phrases
- May talk at length on an unrelated topic
- May talk out of turn
- May not respect personal space

It is important to note that people with autism do not learn social interaction skills in the same way as people without autism. That is, people without autism often learn by observation (e.g., student sees professor immediately reprimand a peer who was

whispering during a lecture; student refrains from doing the same behavior), or after brief feedback from others (e.g., student whispers to peer during class, professor reprimands student, student attends to lecture and does not repeat the behavior; well, at least while the professor is watching…).

For students with autism, some social challenges can be addressed through **individual feedback** to a student. Let's consider the issue mentioned earlier of a student who raised her hand in response to every question asked by the professor. You may be familiar with the "*feedback sandwich*" model of making a positive statement, followed by constructive feedback, followed by another positive statement. For people with autism, receiving negative feedback can occur far too often, which can decrease self-esteem. Therefore, highlighting the positive contributions the student makes can soften the impact of corrective feedback.

In addition, any feedback to the student should be as specific and detailed as possible. Try to avoid general statements that do not give the student details on what they did. Many people with autism interpret interactions literally and therefore need details on what to improve or change. For example:

> AVOID: "You're a good student."
>
> INSTEAD: "You have a 96% average in class, which is a solid "A"."

> AVOID: "I'd like you to put a little more effort into your research paper."
>
> INSTEAD: "Your research paper is 2 pages, and the assignment states 3-5 pages with a review of at least 5 different studies."

For the student who raises her hand too often, the feedback sandwich could look something like this:

1. Invite the student to meet during office hours.
2. Be prepared to identify 1-3 things the student is doing well, and state these specifically. For example, you could say, "I am happy to tell you that you have an 'A' in the course with a 96% average. I appreciate your hard work and commitment to this class."
3. Objectively describe the behavior to be changed. For example, "I noticed that you raise your hand each time I ask a question. While I am happy to see that you are so prepared, I also need to make sure that every student has the same opportunity to earn their class participation points. You currently have all of your participation points, and you could continue to earn full points if you limit yourself to raising your

hand once every 15 minutes." (A clear and specific target is more easily understood by some people with autism as opposed to a general statement, such as "Could you raise your hand a little less often.")

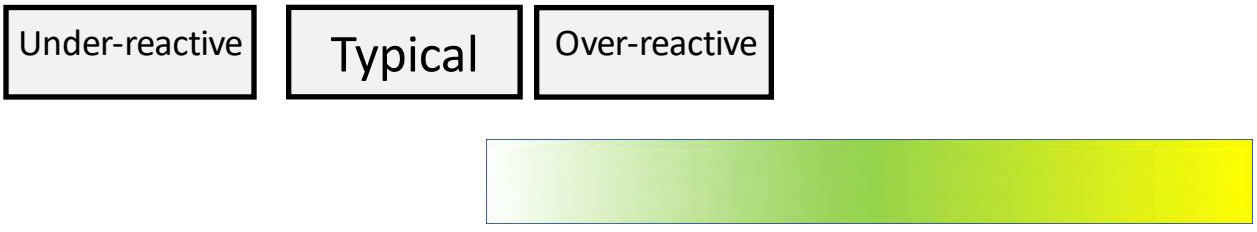
4. Conclude with a positive statement: "Again, your high grades reflect how hard you have been working in this course. Your commitment is outstanding."

Some challenges may not be so readily addressed. In these situations, your first point of contact can be the office for disability services.

If a student reports bullying, feeling isolated and excluded, depression, anxiety, or other concerns, please review your campus guidelines for working with distressed students for more details and procedures for students with active concerns.

Sensory Response

When it comes to the 5 senses, most people with autism have some degree of difference in how they experience sensory stimulation. Their sensory responses may be under-reactive or over-reactive, as illustrated in the spectrum below:



To further complicate the matter, a person with autism may have over-reactivity to some sensory stimulation and under-reactivity to others. For example, he/she may have very acute hearing with consequent sensitivity to loud noises yet be insensitive to cold temperature and wear shorts in wintry weather.

General examples of under-reactivity include the insensitivity to cold temperatures, appearance of not responding to lights or sounds, and high pain tolerance. In contrast, over-reactivity may present as extreme sensitivity to lights, sounds, smells, and textures (e.g., the tag on the inside of a shirt); it may also include synesthesia, the experience of being unable to separate out different sensory experiences (e.g., hearing colors, seeing music). For some individuals with autism, fluorescent lighting may be distracting as they may perceive the light as flickering rather than steady.

Individuals with severe hyper– or hyposensitivity may require some accommodations to the classroom. For example, a person with significant texture sensitivity may not tolerate a lab coat on bare forearms and may need to bring a long-sleeved shirt to wear underneath while in the lab. Some individuals with autism may request that you turn off overhead lights when meeting with you in the office. While such requests may seem unusual on the surface, they are generally in response to visual over-reactivity. In another example, a student may come to class wearing earplugs in response to the loud noise generated by small group discussions. Earplugs provide enough sound dampening to minimize the aversive qualities of the loud noise. Finally, students with an over-reactive sense of smell may ask to sit near the door if other students tend to come to class with strong perfume.

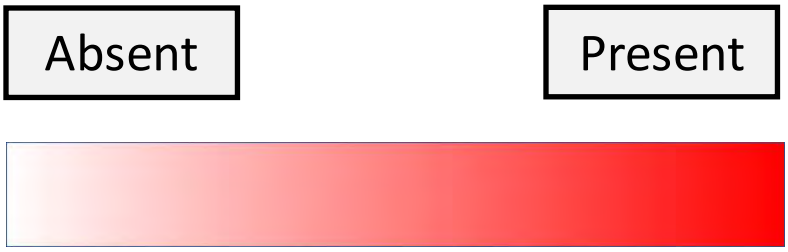
In general, for situations of sensory over– or under-reactivity that arise in the classroom environment, the student should be able to discuss and explain to the professor the strategy that will help them cope. Some strategies may be listed as formal accommodations (e.g., preferential seating), while others may simply require a discussion between student and professor to ensure that the coping strategy is feasible (e.g., wearing sunglasses during class).

<u>Repetitive Behaviors</u>

People with autism show a diverse range of repetitive behaviors that, to the non-autistic person may seem nonfunctional. However, they serve as specific self-regulatory purpose to the individual with autism. Examples of such behaviors may include

- Body rocking
- Flapping fingers or hands
- Rubbing arms/legs
- Repeating a word or phrase
- Bringing up the same idea or topic
- Tics
- Other compulsive behavior

Repetitive behaviors are on a continuum of *absent* to *present*. In addition, a person with autism may have more than one repetitive behavior, and these may occur at different rates.



It is important to note repetitive behaviors can be compulsive in nature; that is, a person feels they have to engage in the behavior, or else their anxiety increases. With the arrival of “fidget spinners” and other “stress-relieving” toys, some students with autism will bring such items to class. If the item is small and not distracting to others, it may benefit the student to have access to the item. However, if the item or behavior (e.g., flapping hands) is disruptive to the classroom, a private meeting with the student is warranted to discuss why the item or behavior is distracting and if the student could engage with a different item to decrease their anxiety. If this meeting does not result in a solution, please contact your office of disability services for additional assistance. In some cases, other students may not be as distracted as you anticipate, and the class may come to ignore hand flapping or the fidget spinner that, on the first occurrence, caught everyone’s attention.

Now it is time to revisit the young people discussed at the beginning of this manual.

Case Examples Revisited

Jaquan, age 22, lives at home with his mother. He is polite and friendly to adults but has a long history of being bullied by peers and does not have any peer friendships. He tends to speak rapidly, making it difficult to follow his train of thought at times. Jaquan has three topics of conversation that he prefers above all others: Pokémon, ecology, and Greek and Roman mythology. If he is not directly asked to change the subject, he will talk extensively on these topics without realizing that his listener is uninterested. Jaquan is in his freshman year of community college, but reports feeling isolated and wants to quit, stating that no one understands him or supports him. Jaquan is diagnosed with autism.

Jaquan has the academic ability to succeed in college but is not receiving adequate supports. Some of his interpersonal skills deficits could best be addressed with specialized supports. One option would be to have him meet several times a week with a trained counselor (on-campus if available; off-campus otherwise) who can teach him specific social interaction strategies, such as varying the subject matter of his conversations. He can practice with his counselor and then apply his skills independently in the classroom, taking time to report specific difficulties to the counselor. He may also benefit from social coaching from trained peers. Students in psychology and education could be recruited as peer assistants by his family in collaboration with his college and given instruction in coaching Jaquan in social skills and accompanying him to college social events.

Steven, age 18, is diagnosed with Down syndrome, a genetic disorder that affects all aspects of his development. Steven does not talk and points to pictures to communicate. Currently, he has 12 pictures of wants and needs on his iPad. He has a range of sports videos he enjoys on his iPad, but prefers to watch them alone in his room, rewinding to watch the same scenes repeatedly. Steven is in a special education school for students with intellectual disabilities where he receives pre-vocational training. Steven also has the diagnosis of autism.

While Steven does not have the academic abilities required for the college classroom, he could benefit from the social environment. In fact, Steven (not his real name) is attending a specialized program for individuals with intellectual disabilities at a large state university. The program is designed to provide age-appropriate socialization and vocational training. Steven attends three days a week to work as an assistant to the football team, taking care of drinks and towels during practice and games. His interactions with others have increased and he now makes eye contact and smiles often while on campus.

Karl is a 16-year-old who lives at home with his parents and siblings. Karl attends a magnet high school for students who are intellectually gifted. He has various interests, including economics and biomedical engineering; he is also a talented writer. Karl has apraxia resulting in difficulties with motor skills: he cannot hold a pencil, dress independently, or speak. He communicates by typing with one finger on a computer keyboard. It takes him longer to complete assignments, but he is very conscientious of deadlines and becomes anxious if his work might be late. Karl has email pen pals and a circle of friends at his school. Karl is also diagnosed with autism.

Karl would clearly benefit from a program for advanced students at a college or university as he is intellectually gifted. He would need the presence of a 1:1 assistant to help him with motor skills challenges and to hold his keyboard for communication. Such an assistant is provided by the K-12 educational system under the auspices of the Individuals with Disabilities Education Act; however, it is not covered by Section 504, which applies to college education. His family would need to provide his assistant and would work collaboratively with the office of disability services to outline the tasks and responsibilities of this role.

Maria is a 17-year-old who lives at home with her parents. Maria speaks to her parents in 2- to 4-word sentences but will only talk in a whisper at school. She is in a self-contained classroom in her local high school for most of the day, where she completes schoolwork at a 3rd to 4th grade level. She is in art and physical education classes with her fellow high school juniors. Maria is gifted in art, and draws with expert precision and detail, favoring animals as her subject matter. She has won several art competitions throughout her school years and accolades from professional artists. Maria is also diagnosed with autism.

Maria demonstrates savant skills in art. In contrast to popular belief, only a small percentage of people with autism are savants in specific domains. Most savants have superior ability in one or two domains such as mathematics, art, or music. Maria would benefit from attending art classes at a college or university as a part-time student with a 1:1 assistant initially. Once she becomes comfortable in the college environment and can communicate her needs more readily, she could attend independently. People such as Maria have had successful careers in art; feel free to search the Internet for "autism and art" to see their work.

Jasmine is a 20-year-old college sophomore. She lives on campus (although she reports not getting along with her roommate) and is majoring in computer science; she has a GPA of 3.9. Jasmine has no difficulty completing her assignments, though she appears very anxious in class. Before class starts, she can be seen rubbing her thighs and arms repeatedly and rapidly. During class, she raises her hand after every question the professor asks. Sometimes, other students in the back roll their eyes or snicker in response to Jasmine's behavior. The professor has given feedback to

Jasmine, praising her enthusiasm and mastery of the material, but encouraging her to give her peers a chance to respond to questions. The professor has also spoken privately to the other students about their inappropriate responses. Jasmine is also diagnosed with autism.

Jasmine may be the most prototypical student with autism (of these five) living independently on a college campus. Her communication, social, and personal skills allow her to be as independent as possible; yet, she does have behaviors that others do not understand. Unfortunately, the common result is the inappropriate peer behavior described above. Jasmine's challenges are in the nuances of social interaction as well as in managing her stress, which manifests as rubbing her arms and legs.

There are a range of possible interventions to be undertaken. First, the students who are responding inappropriately to her by laughing and rolling their eyes need feedback on responding appropriately to people with differences. If this is not sufficient or has already been attempted, then the college's disciplinary process within the Code of Conduct should be followed.

Jasmine would benefit from stress management skills that she could use in any setting. She could seek assistance at the campus counseling center or through a private therapist. This would also benefit her in her difficulties with her roommate, as she may not be aware of the nuances of interaction that people develop when living in close quarters.

Final Thoughts

Students with autism bring unique contributions to their colleges and universities. While they may appear "different," they have much to offer to their peers and professors**. Every college student with autism deserves a chance to be understood and welcomed** through a collaborative process between the student, their family, and the college or university.

Being proactive fosters success. Families of students with autism should reach out to the campus offices for students with disabilities and family services. An in-person or virtual meeting (held before the start of the first semester) between the student, family, and college to identify areas of strengths and needs will allow everyone to feel comfortable at the start of the first semester and will provide much-needed predictability for the student with autism. Families can address areas of concern where additional supports might be needed, and the college can offer referrals if outside assistance is necessary. For example, if a student is hesitant about participating in social events, a fellow student could be hired by the family to accompany the student with autism to 1-2 events per week and model the behavior expected at the event (e.g., cheering for the home team at a game).

Accommodations for students with disabilities are covered under **Section 504 of the Rehabilitation Act of 1973**. In contrast, accommodations in public education (K-12) are governed by the Individuals with Disabilities Education Act (IDEA). Families are encouraged to become familiar with these differences, as parents only have decision-making power under IDEA in public education, while Section 504 places decision-making in the hands of the student and college.

Therefore, students with autism looking for a college education also need to learn **self-advocacy skills**. In some instances, the campus office for students with disabilities can provide education on students' rights, but to be prepared, a family and their college student with autism can begin preparing for the unique transition to the college environment during the student's senior year of high school by taking time to learn about the various roles of individuals involved in student support at the campus.

Open communication is the key to success. For college faculty and staff, this manual can help you identify areas for discussion with incoming students with autism and their families. Colleges are encouraged to pursue such conversation if a family has not initiated the discussion upon acceptance to the institution. For families, during or immediately after a campus tour is the best time to begin a conversation with the college to discuss special needs and how to meet those needs on campus.

Examples of Possible Accommodations for Students with Autism

- Extended time on tests
- Private room for tests
- Preferential seating
    - In front, if a distraction-free view would benefit the student, or
    - In back, if the student needs to step out periodically, or if the student is sensitive to perfume and cologne
- Extended time for longer written assignments/papers, if the student needs to time to consult with the campus writing center before submitting their work
- Use of a calculator for exams
- Use of a small calming item in class (as long as note-taking continues)
- Designated note-taker for the student
- Permitted use of water bottle during class or exams
- Option to read oral presentations
- Option to pre-record oral presentations
- Presence of personal aide in class
- Permitted use of headphones for auditory sensitivity
- Use of alternative communication in class (e.g., voice synthesizer for students with speech challenges)
- Permission to take short movement breaks during class
- Permission to work independently in lieu of group work
- Permission for having a computer in class for note-taking

- And many others, to be discussed by a student with the support of their family and the college or university

Acknowledgements

I would like to thank the exemplary administration, faculty, and staff of Rollins College for welcoming me on campus and in the classroom. Thank you for your openness and willingness to collaborate in helping students with autism thrive on campus. I will fondly remember my time at Rollins.

Thank you, C., E., and G. allowing me to share in your journeys. It has been an exceptional honor and privilege to join you along the way.

References

Beautiful minds, wasted; Dealing with autism. (2016, April 16). *The Economist*, *419* (8985), 9(US). Retrieved from http://link.galegroup.com.ezproxy.rollins.edu:2048/apps/doc/A451562606/AONE?u=wint47629&sid=AONE&xid=9600c813

Scott, L. J., Hart, L., & Volkmar, F. R. (2018). Preface: Special Issue-College experiences for students with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders,* DOI: 10.1007/s10803-018-3463-7

Signs and Symptoms of Autism Spectrum Disorders. (2019, August 27). Retrieved December 29, 2020, from https://www.cdc.gov/ncbddd/autism/signs.html