TRI-STATE WEBINAR SERIES

Post-Secondary Supports and
Students with Autism

Presented by:
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& Terri Swanson, Ph.D.

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Tri-State 2019-2020 Webinar Series

Tri-State Autism Spectrum Disorder Webinar Series

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Learner Objectives

- Participants will learn:
  - The differences in expectations of students in high school vs. post-secondary education programs.
  - The types of supports post-secondary students with ASD may benefit from.
  - About the Marshall University's college program for students with ASD.

Marc Ellison, Ed. D. is the executive director of the West Virginia Autism Training Center at Marshall University. He is a licensed professional counselor who has worked for 35 years to provide person-centered support, services, and advocacy to individuals who live with ASD, their families, and those who support them. Ellison is a member of ASA's Panel of Professional Advisors and a board member of the Autism Society of West Virginia. He was the lead author on the Benchmarks of Effective Supports for College Students with Autism Spectrum Disorder and has written several publications on ASD.

Raven Witzigreuter earned her bachelor of science in biological sciences with a concentration in pre-veterinary medicine and received supports through The College Program for Students with ASD at Marshall University. She was a leader within the Alpha XI Delta sorority, spent a semester at Nottingham Trent in England, and dedicated time to develop skills for future employment in various laboratory positions and research opportunities. She has been on several panels and interview pieces about advocacy, disclosure, and supports in higher education for students with ASD.

Terri Cooper Swanson, Ph.D., is the coordinator of the Pittsburg State University Autism Certificate and the distance learning coordinator for TASN-Autism and Tertiary Behavior Supports.

Resources

- West Virginia Autism Training Center at Marshall University: http://www.marshall.edu/atc
- College Autism Network: https://collegeautismnetwork.org
- Emerging Practices for Supporting Students on the Autism Spectrum in Higher Education: https://www.rit.edu/studentaffairs/ssp/sites/rit.edu.studentaffairs.ssp/files/docs/ASDinHigherEdGuide.pdf
- TASN-Autism & Tertiary Behavior Supports: Transition Across the Lifespan Resources: https://ksdetasn.org/atbs/transition-across-the-lifespan

Thank You!

This webinar and supporting materials
will be archived and available on our websites.

Colorado Department of Education
www.cde.state.co.us/cdesped/sd-autism

TASN Autism & Tertiary Behavior Support
http://ksdetasn.org

Nebraska ASD Network
www.unl.edu/asdnetwork

Emerging Practices for Supporting Students on the Autism Spectrum in Higher Education:

A Guide for Higher Education Professionals

Emerging Practices for Supporting Students on the Autism Spectrum in Higher Education:
A Guide for Higher Education Professionals

Lead Institution

Rochester Institute of Technology

Collaborating Institutions

Eastern University

Mercyhurst University

Rutgers University--New Brunswick

The University of Tennessee at Chattanooga

University of West Florida

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What Is Autism Spectrum Disorder?

Currently, only a limited number of colleges across the nation offer specialized supports that address the needs of the increasing number of college students on the autism spectrum pursuing postsecondary degrees. However, the 1 in 125 children diagnosed with an autism spectrum disorder (ASD) in 1996 are starting to arrive at college campuses, and more recent numbers indicate the diagnosis rate has risen to 1 in 68, over half of whom will have average or above average intellectual ability and be college-bound (CDC, 2014). These dramatically increasing numbers within higher education will change the nature of how we support students, yet there is a lack of information available concerning effective support models. To address the scarcity of information, **this guide incorporates the ideas and successful practices of higher education professionals at postsecondary institutions who have worked with their universities to establish effective supports for students with ASD.** It is the goal of this collaborative effort to facilitate the development of postsecondary initiatives to ensure that students with ASD will find support in campus communities nationwide. This guide will provide higher education professionals with a systematic and practical resource to guide them in the development of a university specific support model for students with ASD.

What is Autism Spectrum Disorder?

The two main distinguishing features of autism spectrum disorder (ASD) are difficulty with social communication, and restricted, repetitive behaviors or interests (Diagnostic and Statistical Manual of Mental Disorders; DSM-V, 2013). Characteristics common in autism spectrum disorders include a reliance on rigid routines, heightened sensitivity to sensory stimuli, and difficulty regulating and expressing emotions. These traits, which are understood to have a neurodevelopmental etiology, vary greatly in presentation and intensity, making this a highly heterogeneous population. This heterogeneity is also reflected in terms and labels used over time. For example, the terms Asperger's Syndrome (AS) and high functioning autism (HFA) have historically been used to reference those on the spectrum with mild autistic traits. ASD was officially recognized as a diagnosis in the 1990s, after which the incidence has continued to rise dramatically. The recent surge in diagnoses (to 1 in 68) may be due to a rising awareness of ASD, broader diagnostic criteria, or, as some have speculated, possible exposure to biological and environmental etiological factors (Boyd & Shaw, 2010). Whatever the root cause, the growing prevalence of ASD coupled with increases in K-12 supports for this population has resulted in rapidly increasing numbers of students with ASD entering postsecondary institutions. While these students are often intellectually capable of mastering college level course material, the challenges which stem from the common characteristics of ASD can pose significant hurdles to the successful completion of a postsecondary degree. In addition, it is important to note that many students with ASD entering college also fall in the traditional 18-25 year old college cohort and bring with them the same developmental challenges faced by their peers without ASD (typically developing peers). These include identity, cognitive and moral development challenges. Therefore, it is essential to keep in mind the common developmental needs of this age group while understanding the distinct needs of this population in order to help them succeed in postsecondary education, pursue their career goals, and contribute to the diverse and skilled workforce of the future.

It is the goal to ensure that students with ASD find support in campus communities nationwide.

Individuals with ASD possess unique strengths that can help them excel in academics as well as other life realms. These characteristics often include a high motivation to learn within focused areas of interest, a propensity for visual learning, skilled rote memory, and superior math skills. In addition, they bring a diverse perspective to problem-solving, can be meticulous about perfecting their work, have an eye for detail, and often have a uniquely logical way of thinking that affords them the ability to arrive at practical solutions. While students with ASD arrive at college with many favorable qualities, certain skill sets are typically underdeveloped and therefore negatively impact the transition into and persistence though college as well as their post-college placement in the workforce. These skill sets have been categorized and grouped into six domains in order to help the reader better understand the prominent areas of challenge and ultimately to assist higher education personnel in choosing practices that might most effectively help students with ASD reach their potential. The six domains, which have been identified by reviewing existing literature and by consulting with experts in the field, include: **Executive Functioning, Academic Skills, Self-Care, Social Competence, Self-Advocacy, and Career Preparation.**

Executive Functioning

Executive functioning refers to the cognitive processes that allow for goal-directed activity. These prefrontal cortex capacities include organization, working memory, complex problem solving, sustained attention, and self-regulation (Parker, D.R. & Boutelle, K., 2009). Deficits in executive functioning can make daily tasks, such as organizing academic work, challenging and can also make it difficult to control emotional and behavioral impulses.

Individuals with ASD possess varying degrees of executive functioning deficit, which can make it difficult to adapt to the organizational aspects of independent living and self-directed learning required for college success. While often fully capable of mastering course content, these students sometimes struggle to carry out the actions (e.g., planning, prioritizing) necessary to initiate and complete academic work. During high school, consistent support, oversight and guidance from family and/or school personnel may have facilitated success; however, in the postsecondary world, these external supports are often limited or no longer readily available.

Academic Skills

Academic skills refer to specific strategies and techniques that enable successful learning and academic progress. Examples include test preparation, note-taking, textbook reading, library/research skills, writing competency, and working within one's learning style.

For all transitioning college students, an initial adjustment to the rigor of college-level coursework is common and expected. Typically developing students adapt by monitoring academic progress and applying new study tactics when necessary. On the other hand, students with ASD, many of whom have successfully navigated high school academics with rudimentary academic strategies, can struggle with a rigid tendency to stick with the familiar. This tendency can limit the flexibility needed to change learning methods and apply new strategies in response to varied teaching styles or diverse academic disciplines. Although they often possess strong language skills, college students with ASD may struggle with college-level writing due to problems with organization, abstract language, and perspective taking, as well as practical limitations resulting from underdeveloped fine motor coordination. Without specific instruction in these areas, students with ASD can struggle with learning and applying the strategies necessary for academic success.

Self-Care

Self-care involves maintaining one's personal wellness, including sleep, hygiene, exercise, nutrition, sensory integration, stress management, medication management and budgeting. In essence, this domain corresponds to cultivating optimal well-being and taking responsibility for one's health.

While the transition from childhood to adulthood represents a time in which individuals gradually take ownership of providing for their own needs, students with ASD may need additional time to develop independence in the area of self-care. Students with ASD frequently struggle to maintain consistent

hygiene and sleep patterns and may have difficulty independently managing medications necessary for focus and stability of co-occurring conditions such as attention deficit disorders, anxiety, and depression.

As a result, students with ASD may struggle to function adequately enough to meet expanding academic responsibilities. College life is also full of new and varied stimuli (e.g., fire alarms, crowded dining halls, constant socialization, etc.) that make it particularly difficult for those with sensory integration challenges. Without effective ways to handle sensory overload and other stressors, students with ASD can become overwhelmed and may resort to familiar self-soothing tendencies, such as rocking or pacing. These tendencies could be perceived as socially inappropriate, leading students with ASD to become increasingly isolated from peers.

Social Competence

Social competence refers to the ability to relate to others and is affected by how an individual understands and responds to verbal and nonverbal communication. Included in this domain are the interpretation of others' thoughts and feelings, social reciprocity, and comprehension of language pragmatics (Tager-Flusbert, 1999). In essence, social competence is the ability to get along with others; a critical skill for establishing and maintaining personal and professional relationships both during and after the higher education experience.

While most people develop mastery of the intuitive nature of social interaction in early childhood, those on the autism spectrum often don't form the same understanding of social relatedness or possess the same social skill set (Stichter, et.al, 2010). This deficit makes navigating the socially laden atmosphere of college particularly difficult for students with ASD. Challenges with initiating conversations and the inability to read social cues leads to failed attempts to connect with peers and ultimately contributes to isolation and loneliness. Students with ASD also tend to interpret communication literally, making it difficult to understand sarcasm, as well as social and classroom norms. Additionally, students with ASD often possess excellent vocabularies and can appear highly articulate, which can lead others (peers, faculty, or administrators) to misinterpret social difficulties as disrespect or indifference.

Self-Advocacy

Self-advocacy refers to knowing and communicating one's needs while understanding corresponding rights, responsibilities and resources (Brinckerhoff, L.C., 1994). Paramount to success in this domain are self-awareness, the capacity to anticipate challenges, and the ability to access appropriate resources.

Throughout the primary and secondary educational process, parents and/or school personnel often identify and plan supports for students with ASD, providing little opportunity for these students to develop and practice the self-advocacy skills necessary at the college level. This becomes a challenge in the college environment as the process for requesting accommodations and accessing support services requires assertive independent action on the part of the student. Additionally, difficulties with planning, personal flexibility, and social communication, make it hard for students with ASD to recognize how and when to ask for help, often resulting in a failure to access adequate and timely support.

Career Preparation

Career preparation refers to vocational exploration, the job search and application processes, as well as gaining appropriate work experience. Included in this domain are the skills of networking, resume-writing, interviewing, and navigating the social world of work. The importance of career development during the college years cannot be underestimated given that securing fulfilling employment is one of the ultimate goals of higher education.

While postsecondary institutions are integrating career preparation initiatives at earlier stages of the college experience, these initiatives typically fail to address the specific challenges of individuals with ASD, who often find themselves underemployed (Wehman et al., 2014). College educated

students on the autism spectrum may struggle to transfer knowledge and skills to employment settings. In addition, their social interaction style can undermine their chances of success in an interview, where candidate fit is often based on "soft-skills" (e.g., personal characteristics and interpersonal relations) rather than measurable skills or educational background. Once hired, the indirect social context of work can be confusing and sensory integration issues can make it difficult to function in work environments without appropriate accommodations and supportive management.

Each individual student with ASD, like their typically developing peers, enters college with a unique set of strengths and challenges. The domains described above represent some of the most prevalent areas of concern as students with ASD transition into and strive to find success in college and beyond. Additionally, it's important to consider the realities of the college environment that may present further challenges, adding to the difficulties that some students have in earning a post-secondary degree. Some of these factors are addressed in the following section.

While students with ASD arrive at college with many favorable qualities, certain skill sets are underdeveloped.

Unique Opportunities and Challenges in the College Environment

Institutions of higher education have developed support structures and common practices in response to the varying needs of college students. For example, many colleges have writing centers to aid students in the drafting process for course assignments, tutor services to assist students in mastering college level content, and counseling centers to address the mental health needs of students. Campus disability centers ensure equal access for students with disabilities and multicultural centers help enhance the college experience for students from diverse ethnic and cultural backgrounds. Even with a robust framework of services, students with ASD often struggle to adjust to the complexities of navigating a college system and therefore don't benefit from the traditional support structures. Adding to the challenge for this population is adjusting to the complex shift from high school to college. This transition includes changes in legal mandates that impact a student's rights and responsibilities as well as adjustments to a new and increased level of independent functioning.

Rights and Responsibilities

The rights and responsibilities for students with disabilities change considerably upon entering postsecondary education. In high school, the Individuals with Disabilities Education Act (IDEA) emphasizes student success, and guarantees a free and appropriate education in the least restrictive environment. School districts take responsibility for identifying students' needs, determining modifications and implementing a plan for success based on a student's Individualized Education Plan (IEP). In high school, accommodations may include significant modifications to curriculum, testing format or grading. Additionally, school districts cover the cost of evaluation and documentation and parents or caregivers play a primary role as advocates.

Upon entering college, IDEA is replaced by support from civil rights mandates, the Americans with Disabilities Act (ADA) of 1990, ADA Amendments Act of 2008 and Section 504 of the Rehabilitation Act of 1973, which emphasize access to education. Postsecondary students must seek out services by self-identifying as a student with a disability to the appropriate office, providing disability documentation and submitting a request for accommodations. While parents play an important role in preparing their

students for the college experience, students must initiate the accommodations process and communicate their own needs, with limited parental support. Accommodations in the college environment do not alter coursework or degree requirements and are meant only to remove barriers and ensure that an otherwise qualified student has an equal opportunity to participate in academic programs with little tailoring to individual needs (Thomas, S.B., 2000).

In addition to changes in legal mandates, there may also be practical differences in the way services are offered in higher education. While some supports may be offered in the form of approved accommodations, other needs are commonly addressed through self-accommodation or may be covered by noncompulsory, supplemental student services. For example, a student who received an accommodation for preferential seating in high school may be expected to arrive to a college class early to secure a preferred seat location on their own. For some students, the accommodations received as part of a high school IEP may not be deemed reasonable in the college setting and may instead be addressed by non-mandated, supplemental support services in the postsecondary setting. For example, a student who received homework support or individualized instruction from a special education teacher or personal aid as part of an IEP may not receive such support as an accommodation in college but instead will be expected to seek out the tutoring or academic support services available to the general campus population. While institutions of higher education have developed pathways and supports to meet ADA requirements for students with disabilities, some of the unique supports typically needed by students with ASD are often not addressed within a traditional accommodations or college support services framework. For example, traditional accommodations and services do not typically address the social deficits or skill development that might help enhance the participation and performance for students with ASD.

Not only are supports lessened and decentralized from high school to college, but behavioral expectations and consequences for noncompliance also differ. For example, IDEA requires that a student's disability be taken into account when considering disciplinary action resulting from a violation of the school code of conduct. This is not the case in higher education, where students found in violation of conduct rules are held fully accountable for their behavior regardless of disability. This can be especially problematic for students with ASD who may have difficulty recognizing social norms and understanding behavioral expectations and may struggle with functioning appropriately in less structured college environments.

Independent Functioning

Beyond issues of disability mandates and expectations for support services, students with ASD struggle with the increased need for independent functioning required in a college environment. While the independent living requirements of college can be a difficult adjustment for all students, students with ASD may find the transition especially challenging as they face independence from caregivers and educational professionals who have assisted them in meeting many of their daily needs. College students, working toward becoming fully functioning adults, are expected to take more responsibility for navigating the environment to meet their own needs. For students with ASD, who are accustomed to a more centralized high school support structure, independently maintaining personal care routines, managing medications, organizing daily schedules and appointments and seeking out needed resources in a more decentralized college environment can be overwhelming.

College is a socially-laden environment and therefore difficult for individuals who have been dependent on adults to assist with peer connections. Lagging behind their typically developing counterparts in emotional and social development, students with ASD can be perceived as naïve and be vulnerable to bullying. With minimal adult monitoring of peer interactions within postsecondary settings, victimization of those with ASD can be common. Such challenges are especially prominent in residential colleges where students experience high levels of fluid social interaction and large amounts of unstructured and unsupervised time. For students with ASD, unanticipated social and living challenges distract from the learning process and can negatively impact success in the classroom.

The realities presented as a result of changing rights and responsibilities and requirements for increased independent functioning, make the transition to and success in college especially challenging for students with ASD. Significant college resources are devoted to supporting all students through the

college transition process with standard initiatives such as first-year seminars, academic supports, and cocurricular programming opportunities. While this commitment has become a common feature across higher education and is the result of many years of repetition and refinement, there is a growing need to modify standard practices or create specially designed supports to meet the unique needs of the increasing population of students with ASD.

The scarcity of targeted support services has a negative impact on the outcomes for students with ASD on college campuses.

Taking Action: Mitigating Student and Environmental Challenges

As outlined in the previous sections, students with ASD on college campuses today face a myriad of challenges based on discrepancies between the unique needs of the individual and the customary college environment supports. This section of the guide serves to outline ways in which colleges can work to mitigate the barriers to success for students with ASD. *NOTE: The specific recommendations and examples provided are based on the practical experience and successful outcomes from the collaborating institutions and contributors to this guide.*

Whether stemming from individual or institutional realities, the challenges facing students with ASD can be complex and most institutions lack adequate and/or intentionally designed assistance. The scarcity of targeted support services has a negative impact on the outcomes for students with ASD on college campuses, making it difficult for them to reach their potential as independent employed adults (Gerhardt & Lainer, 2011). **Emerging practices dictate that ensuring the success of students with ASD in higher education requires two types of supports: those that indirectly impact student outcomes by creating a welcoming and supportive campus climate; and those that directly assist individuals with ASD through specific services.** Building a more inclusive and accepting campus community can have a substantial impact on the experience and success of students with ASD. Furthermore, students with ASD will only benefit from specialized direct supports when implemented within a campus culture that embraces them as important members of the campus community.

Indirect Support
Creating a Welcoming and Supportive Campus Climate

One of the best ways to improve the experience and learning outcomes for students with ASD is through a positive shift in the campus climate, with a focus on influencing the broader community's attitudes and understanding of what students with ASD bring to the campus community. This approach benefits all students, including students who may share some of the characteristics of those on the autism spectrum, or those diagnosed with ASD who choose not to disclose or identify themselves as such. Shifting campus culture can be an arduous task and requires a long-term and sustained commitment – but developing a focus on one or all of the following areas has been shown to establish a foundation for this change.

Taking Action: Mitigating Student and Environmental Challenges

Raising Awareness and Acceptance

Indirectly supporting students with ASD by creating a supportive campus environment can begin with awareness-raising events and intentional efforts to increase understanding and acceptance. There is an overall movement in higher education to be more proactive in integrating populations who are traditionally underrepresented on campuses. A move towards including people with disabilities as a form of human diversity can be a platform for incorporating underrepresented groups into multicultural celebrations and diversity appreciation events. Autism Awareness Month (April) can be a venue for educating the campus community through special events, presentations and thoughtful discussions led by guest speakers, students, or siblings of those on the autism spectrum. Campus community members interested in providing support to students with ASD may also benefit from the implementation of ally or support groups, creating a place where members can share experiences, gain greater understanding and help promote positive cultural change. Media exposure highlighting the achievements of individuals with ASD can also enhance community awareness at little or no cost. Campus life leaders and others who plan community events should be encouraged to improve inclusivity in their event planning by considering the needs of those with sensory and environmental sensitivities, allowing students with ASD to be more fully included in broad educational and social experiences.

Training the Campus Community

Another effective mechanism that serves as a basis for an inclusive college environment is campus-wide training, which has been used in support of many diverse initiatives across academia. Such training can but need not be mandatory in nature. To ensure higher level administrative support for training, these initiatives can begin with directors, administrators, and managers; and work down to include all who serve students (e.g., lab instructors, teaching assistants, tutors, academic advisors, campus police officers, "front-line" office staff, admissions officers, financial aid counselors, campus health professionals, etc.) Position-specific training helps staff understand the types of situations they may encounter within their roles; writing tutors may need to change their approach for students who struggle to grasp diverse viewpoints; and cafeteria staff can be more aware of dietary sensitivities and food aversions.

Ideally, campus-wide training will occur annually for some groups (e.g., residence life and student orientation staff training), or on an as-needed basis for others (e.g., departmental requests and division level meetings), or it may take the form of a training packet, shared electronically, that includes items such as fact sheets, training videos and links to relevant articles. Providing ongoing professional development opportunities allows for the inclusion of new employees and those hired on a temporary basis (e.g., adjunct faculty), who may have limited access to university training resources.

There are many effective strategies for the delivery of such training, including helping participants consider their own personal connections to autism. Identifying personal connections allows participants to more easily relate to the challenges and realities for college students with ASD, which can increase empathy and positive perceptions. Additionally, students with ASD or those with siblings on the autism spectrum can be brought into the training process to share first-hand experiences. An open dialogue format, managed with appropriate sensitivity, encourages trainee participation and is a beneficial method of emphasizing the strengths of the ASD population in addition to addressing any stigmas associated with autism.

Faculty training, specifically, can also incorporate the benefits of strong pedagogical methodology and effective, inclusive classroom management that will positively impact all students. Training should focus on assisting faculty in understanding the importance of direct communication, including the use of

Some of the unique supports needed by students with ASD are not addressed within a traditional accomodations or support services framework.

detailed syllabi, concrete language and clear feedback when working with students with ASD. Faculty should be trained to consider the potential for some flexibility in the delivery of assigned course work (e.g., alternatives to public speaking), as well as ideas related to the facilitation of group work (e.g., designating clear roles and monitoring progress). Additional relevant practices might include incorporating a statement into the syllabus that reflects a respect for diversity and inclusiveness, utilizing a variety of content presentation methods to address a variety of learning styles. Training might include providing faculty with tips for structuring classroom discussions.

Throughout all training, faculty and staff should be reassured that supporting students with ASD does not equate to providing special privileges. No modifications to the educational standards or course requirements are required; however, direct and supportive feedback surrounding expectations, including those for appropriate classroom behavior, can significantly assist students with ASD to become contributing members of the classroom.

Developing Campus Expertise

Another method of indirect support involves providing consultative resources to campus community members who interact with students with ASD. The availability of designated campus experts familiar with the ASD population can aid the campus community (faculty, staff and students) to better understand the interactions or behaviors of students with ASD that are sometimes difficult to interpret. A specially-trained group would ideally consist of individuals from various key departments (e.g., disability services, residence life, campus police, etc.) who could serve as resources to colleagues in their respective offices. Campuses might consider the establishment of a disability liaison in each academic department who could advise faculty on effective methods of instructional design and strategies to approach various scenarios, promoting increased flexibility in teaching. A liaison may also assist faculty members in interpreting unusual behavior in the classroom. For example, the behavior of a student who continually approaches the board during a lecture may be misunderstood as disruptive but may simply be the student's response to earlier direction to "write down everything I put on the whiteboard".

Enhancing Existing Programs and Services

Most colleges have existing programs, services and support networks in place for all students. In many cases, slight modifications to these existing efforts may make them more accessible to students with ASD, whether or not they have disclosed their diagnosis. The appropriate development of these resources can be a vital component in the success of all students, including those with ASD. An example of success through this strategy in a standard tutoring center might be a shift from a drop-in appointment model to a model that includes individualized recurring appointments. This shift might better meet the needs of all students but is particularly beneficial to students with ASD who thrive on predictability and routine. Setting up similar regularly scheduled appointments with university support staff (e.g., advisors or academic coaches) can provide an increased level of oversight and support and provide the repetition that assists these students' in mastering competencies that might be met in a single meeting for typically developing students.

This approach also can be expanded as a direct support for those students who chose to disclose a ASD diagnosis. For example, a tutoring center might be able to identify specific tutoring staff with additional experience in working specifically with students who have needs beyond those typically addressed by general tutors. Other examples of targeted services for students who are formally identified as being on the autism spectrum are outlined in the following section.

Direct Support Developing Targeted Services for Students with ASD

In addition to indirect approaches that broadly address the development of a more inclusive and supportive campus climate, some campuses may consider the creation of targeted support services to more directly impact the success of individual students with ASD. Based on the size of the population of students with ASD and/or the complexities of their needs, some institutions may choose to explore the development of a comprehensive support program while others may rely upon a more ad hoc approach,

responding as needs arise. As is the case for many underrepresented but growing populations on college campuses today (race/ethnic groups, first generation, low income, veterans, returning adult learners, and students with disabilities) targeted support services can be very successful in increasing persistence and graduation rates.

The following section provides examples of direct supports drawn from the established, compre-hensive support programs of the collaborating institutions which contributed to this guide.

Coaching and Mentoring

In general, coaching and mentoring allow for the development of supportive, nonjudgmental relationships that facilitate the identification and attainment of goals, as well as the growth of competencies through modeling and guiding. Through non-directive coaching relationships, students learn to capitalize on their positive attributes and are assisted in the identification and progression of chosen goals. During the interactive and iterative coaching process, frequent feedback and supported decision-making leads to a sense of mastery. Although often carried out in a one-on-one format, coaching and mentoring can also be offered in the form of support groups or small group seminars. Professionals or peers can serve in the role of life coach, social mentor, etc., and meetings may be structured, unstructured or student-led. Peer mentors , in particular, can help with self-acceptance and the bolstering of self-esteem through vicarious learning opportunities. Observing and experimenting with new behaviors amongst accepting peer mentors can build confidence and positive feelings for students with ASD. With mastery experiences in these "safe" environments, students with ASD are more likely to try new behaviors in other settings, facilitating social connectedness and furthering academic success.

Targeted Instruction

Students with ASD often benefit from targeted instruction in those areas where appropriate skills or knowledge are determined to be lacking. Such instruction can be delivered individually (e.g., tutoring) or in small groups (e.g., seminars, mandatory study periods, or semester-long courses) either through an established schedule or on an as-needed basis. In some cases it may be possible to modify existing instructional materials. In these cases care should be taken to ensure the material is modified to address the skill deficits of students with ASD. The focus of instruction is limitless but can include executive functioning training, study skills instruction, social thinking skill building, leadership development through community outreach (e.g., speaking at an autism awareness event), career preparation workshops, sensory integration counseling, mindfulness meditation, social anxiety groups or relationship skills groups.

Transition Programming

For first year students with ASD, the initial introduction to college and the new student orientation experience can be an overwhelming and over-stimulating experience. Those with ASD have the added burden of attempting to mitigate functional limitations, such as adapting to unstructured and socially-embedded environments. Pre-college, specialized orientation or summer preparation programs can equip students with ASD with tools to help them acclimate to new surroundings and begin to establish peer relationships, as well as provide them with time to proactively arrange for appropriate accommodations and/or support services prior to the start of the academic year, while campus is less crowded. Structured transition programming can include guidance in navigating the college campus, introductions to key personnel (e.g., academic advising staff), self-advocacy training, independent-living instruction (e.g., navigating dining halls or other facilities), appropriate professional communication practices (e.g., responding to emails) as well as time management and academic skill-building sessions. These programs can range in length from one day to several weeks, and the latter may incorporate the completion of a credit-bearing class to establish effective academic habits and practice structuring schedules. Many specialized orientation programs also allow for early move-in dates, affording students an opportunity to get settled into routines and familiarize themselves with the campus before the arrival of peers.

Supported Living

Designated housing communities for students with ASD can provide the sense of belonging often lacking in the lives of those with ASD, who may have struggled to be accepted by peers throughout childhood. Living in community (eg. specialized or themed floor) with peers with ASD can provide opportunities to build social connections within a safe and supportive environment; as well as allow for increased oversight and early identification of problems (e.g., social withdrawal or poor hygiene) for quick intervention. These supported living communities can be supervised by specially trained residence life staff, who can more readily recognize the signs of a student in distress and work proactively to mitigate challenges.

Assigning students with ASD to single or limited roommate placements provides another way to create supportive living environments within a standard campus housing system. Single dorm rooms often provide a refuge from the sensory overload that can result from interacting with a busy college environment on a daily basis. Additionally, some sensory integration issues may make it impossible to cohabitate with a roommate, making a private room accommodation necessary. For example, a student with sensory issues may require a private room in order to maintain sleep or hygiene habits. Some students with ASD may consider transitioning from a single accommodation to a shared living space once they feel more comfortable with the additional social aspects of college life. It is important to remember that each student's situation is unique, and providing choices related to living arrangements respects a student's autonomy and develops independent decision-making skills. To help students in this decision-making process, it may be useful to provide a checklist of independent living competencies and possible scenarios that might be encountered in a residential living situation. For those who prefer a shared space option, residence life staff can assist students in stating their needs (e.g., need for quiet time and space) to peers and help students navigate the creation of roommate contracts which set expectations for shared living arrangements and can minimize roommate concerns.

Resident advisors are charged to develop community and can identify signs of distress within their assigned living environment. In the case of students with ASD who are comfortable with disclosing, it may be beneficial to encourage students to meet with the resident advisor to discuss any sensitivities or concerns about community living. When resident advisors are aware of the individual needs of their residents with ASD they are better prepared to facilitate day-to-day support for these students.

Social Programming

Planned social events that include mentors and other knowledgeable staff provide students with ASD opportunities for connection, modeling, and a chance to try new behaviors and communication skills that can build social confidence. These gatherings may take the form of community outings, meal gatherings or group volunteer experiences. Campuses may consider the possibility of creating a dedicated lounge or study space for students with ASD to gather. To enhance integration with the larger university community, social events can be posted and open to the entire campus community, or students with ASD can be encouraged to invite familiar peers. Additionally, integrated spring break programming can promote social interactions among students both on and off the spectrum to further enhance social connectedness, acceptance and understanding. Students with ASD should be encouraged and supported in participating in campus-wide programming, clubs and events. Mentors can assist students with ASD in identifying groups and spaces on campus where they can meet others with shared interests.

Student Empowerment

Methods of support that emphasize empowerment and self-determination, such as person-centered planning and strengths-based approaches, are ideal for fostering a healthy self-concept for students with ASD. Developing higher levels of comfort with making decisions, and taking responsibility for decisions made are central to the growth and development of all students. Such development will not only increase the ability of students with ASD to have success in higher education but will also lead to greater success and confidence in all aspects of their lives.

The self-esteem of students with ASD can be nurtured through the sense of belonging that specialized support programming affords. The establishment of caring reciprocal relationships, which have

often been lacking in these students' lives, is critical to building the self-worth and resiliency that allows for coping with the stressors of college life and beyond. However, it is also important to be aware of potentially transferring dependencies from parents to college faculty, staff, or peers as this can hinder the independence students with ASD need in order to succeed in the long run.

Empowering students with ASD often requires empowering parents, a vast majority of whom have had a life-long role as their child's primary supporters and who may lack connections with others who are launching a child with unique challenges into independence. Thus, empathetically educating parents on how best to support their child's transition to adulthood is crucial and requires setting clear boundaries. Parents should be discouraged from corresponding with faculty or support people on the student's behalf and should be reminded to include their student in all email correspondence when outreach is necessary. A well-meaning parent might be tempted to complete an online test for their child during a particularly stressful time in the semester, not realizing the seriousness of academic dishonesty. Being clear with parents about how they can empower their student will help avoid over-involvement and ensure that students move toward becoming self-sufficient adults.

Campuses seeking to meet the needs of students with ASD, may utilize both indirect and direct supports. Regardless of the specific services and programs offered, there are a number of other factors (legal, logistical, ethical) which must be considered in the design of a successful model. These considerations are addressed in the following section.

A support model can range from making existing services more accessible to developing a specialized program of support.

Identifying a Campus Response to Support Students with ASD

A support model for students with ASD can range in scope from making existing services more accessible by enhancing current structures and policies, to developing a fully staffed program with specialized direct supports. Whatever the approach, it's important to remember that an ASD support model should uniquely reflect the university's strengths, mission, and culture, and not simply replicate an existing program. It may be helpful to consider a progressive development of services, starting with a focus on influencing the campus culture and modifying existing services to meet the unique needs of students with ASD as first steps. This process can be followed by the further development of targeted or enhanced services or possibly the development of a more comprehensive program model, as desired and practical.

The following section and accompanying worksheet are designed to assist higher education professionals in considering the needs of their campus and the students they serve to determine the scope of services that can or should be offered.

Getting Started: Assembling a Task Force

Whether considering the development of indirect or direct resources, it is helpful to assemble an implementation team or task force. This allows for comprehensive ideas, a wide reach of campus support, and the formation of collaborative relationships that will be critical to success. This team can also be ben-

eficial when modifying initial plans to accommodate changes in campus structure, culture or available resources. Task force team members might include representatives from student affairs, academic departments, and direct service and support staff from across campus. If appropriate, those who are knowledgeable and experienced with supporting this population (e.g., those with family/friends with ASD) can serve as powerful allies and can be important additions to this team. Task forces can also seek the expertise of professional consultants familiar with developing college support programs for students with ASD or those with a background in Applied Behavior Analysis (ABA), an approach used to impact communication and learning challenges for children on the autism spectrum (Rosenwasser & Axelrod, 2001).

A task force may work together for an extended period of time during which key planning decisions are made. One key decision is the intentional placement of the program within the campus structure, which often has significant implications. For example, a program operating within the disability office will have ample resources when it comes to accommodations, but may have a different perspective on support services than a program housed under a counseling center or an academic learning center. Whatever the approach, strategies should match the known or anticipated need, the available campus resources and expertise, and should complement the overall campus environment. The task force may also help shape the campus priorities and ensure that supports (either dedicated or general) align with stated goals, such as enhancing the students' access to or increased use of available campus resources.

Task forces are also beneficial for ongoing oversight once initiatives are determined; ensuring solid, transparent decisions with the input of students, parents, and community partners. Regular meetings ensure accountability and allow for consultation and oversight from initial planning through evaluation, fostering continuous improvement. Additionally, an active task force may be charged with establishing policies and procedures to help address legal and ethical concerns and ensure that program objectives and student success remains a priority. For example, a program serving students with ASD may be looked at as an available subject pool for research departments. In this case an established policy from the task force regarding research may be beneficial. Another significant policy area relates to disclosure, which is explored in the next section.

Issues of Disclosure

The issue of disclosure impacts how we serve students with ASD in two different ways. In the first case, the determination of when and how higher education professionals may share information about a student's confidential or private information is governed by legal and ethical standards and must be managed. In the second case, it is important to make appropriate guidance available to students about the decision of when and to whom a student might disclose information about a diagnosis of ASD. In both cases, the development of policy and procedures to guide day-to-day practice will be beneficial.

Professional Disclosure

Extensively using the campus infrastructure to support students with ASD requires continual interaction and collaboration across the campus community. Sharing of student information through these collaborations must be done in compliance with privacy protection laws as well as internal policies and procedures regarding the treatment of student records (Gilley, A. & Gilley, J.W. (2006). The Family Educational Rights and Privacy Act (FERPA) protects educational records, which includes documentation submitted to a postsecondary disability office. This information cannot be shared without written consent from the student. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) protects health information, such as physical and mental health conditions, and applies to entities that include university health care providers or clinics. Thus, the college counseling center or student health services cannot share information with anyone without the student's written permission.

Cross-campus collaboration is effective in supporting the success of students with ASD. When professional judgment necessitates disclosure of student information, signed consent forms should be on file and specify who, what, and under what circumstances student information will be shared. Separate release forms can be used for internal and external collaborations. Decisions to disclose should also consider whether specific identifying information is required. For example, there may be a need to

collaborate with appropriate residence life staff. The disclosure may be general ("you may have a student on your floor with ASD.") or specific ("The resident in room 24 is a student with ASD").

Beyond the campus community, parents can be integral members of a collaborative team and are often in a good position to provide feedback about how best to assist the student, particularly in times of challenge. However, there must be careful attention paid to a student's right to privacy. Furthermore, there should be a focus on supporting the student's move toward independent functioning while reducing the student's reliance on parents. Thus, students and parents must be provided with clear guidelines regarding when and what information will be shared and the frequency of interaction parents can expect to have with college staff. Of course, the policy for parental involvement and consent to share information needs to align with campus culture and policy.

Student Disclosure

The decision to disclose a non-apparent disability is a complicated one. It is important to remember that some students with ASD may not see the benefit of disclosure and may have a strong desire to avoid being labeled. Students can be empowered to make disclosure decisions by understanding the disclosure process and the potential benefits of disclosure. Role-playing various scenarios and initial assistance in crafting disclosure emails to professors is beneficial and will provide mentoring and guidance to the student on how to effectively self-advocate. It may also be helpful to provide students with a template disclosure letter and fact sheets that might be helpful in working with their faculty. It is importnat to consider that some students may lack an official diagnosis of ASD but nonetheless experience challenges similar to those on the autism spectrum that disrupt everyday activities.

Considerations for the Development of a Comprehensive Program Model

Providing direct service and targeted supports to students with ASD becomes problematic when students don't identify to the university as a student with a disability. However, where there is an increased population of students with ASD who choose to disclose their diagnosis and consequently an increased demand for services, there may be a need to consider the development of a comprehensive program dedicated to serving students with ASD. In addition to the factors already discussed, *the following sections address areas that should be reviewed by campuses considering a comprehensive program model.*

When a campus begins to consider a comprehensive program, it's important to be aware that some faculty, staff or administrators may express apprehension about the possibility that specialized supports could attract students with ASD to the campus community. It is important to remember that the population of students with ASD who are qualified to attend institutions of higher learning will continue to grow and students with ASD, like their peers, will continue to choose campuses based on overall fit; weighing factors such as size, field of study, academic reputation, cost, and location. Developing services in an intentional and measured manner and taking into account a growing need may help to alleviate common concerns. Providing proactive support for students with ASD allows the university to use campus resources in a more intentional way by anticipating problems and developing preemptive measures. Carefully considered supports for students with ASD can also help reduce crisis situations that can arise for college residential communities, counseling centers and campus police who may be otherwise unprepared to support this unique population of students.

Establishing Program Admission Criteria and Intake Process

Standard practice dictates that students must first be found eligible for admission to the college before applying for supplemental supports. After successful admission, carefully selected program admission criteria allow for the inclusion of students with ASD who might most benefit from the program's mission and available resources. Program admission criteria may take into account both formal and informal assessments. For example, programs may assess a student's readiness based on social, emotional, behavioral, and independent living functioning, all of which serve as important predictors of success in college. The program application process might also include a writing sample to reveal the student's ability to

synthesize and organize information, or it may require interested students and/or parents to participate in an interview process. Such interviews, which can be conducted in either individual or group formats, can provide valuable information about the student's level of functioning, as well as the family's expectation, and interactive style. Some program applications may require supplemental or third-party documentation, such as a primary diagnosis of ASD, while others simply require self-reported identification as someone who can benefit from specialized services for students with ASD. High school IEP's may also be reviewed to understand the scope of accommodations and supports that may be required for the student to be successful in the college environment. In some cases, the level of support that is indicated may have resource implications and be beyond the ability of the program to address. In this case, a referral to alternative supports may be necessary. For example, previous history, including the provision of a one-on-one aide in high-school, out-of-district or alternate high school placements, modified grades or courses, past criminal activity or serious mental illness, may warrant serious consideration about program admission status. Reviewing such information helps ensure that students are ultimately directed to the most appropriate programs to best match their needs.

As part of the admission and intake process, two challenging scenarios may develop and it is important for institutions to consider, in advance, how to respond. In one case, students with ASD may have needs that cannot be met, even with support within the current traditional college structure. These students may consider participation in an intellectual disability program or may need to seek out programs with more intensive or specialized mental health supports prior to enrolling in college. Thus, it is recommended that these students and their families be informed of potential alternatives. Alternatives may include referral to more support-intensive programs in the community and the opportunity to reapply for program admission after addressing underdeveloped skills. In some cases, the university may allow students to defer college enrollment for up to one year, making deferral and reapplication a viable option.

Another important consideration is for those students with ASD who attend the university but elect not to participate in the support program offered by the college or those who are not accepted to the specialized program based on match or space but still elect to attend the university. In these cases, it is important to ensure that the student and family have an understanding of the supports that will be available, including accommodations and generalized support services that would otherwise be available to all students at the college.
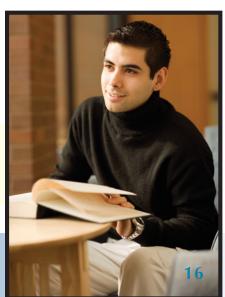
Regardless of admission to and participation in a comprehensive program, an important message to families, and one that is often difficult to understand, is that a strong academic record, even combined with comprehensive supports, does not guarantee college success. Just as is the case with typically developing students, outcomes are not predictable and not all students will find success

Program Staffing

Staffing models for programs dedicated to students with ASD vary according to many factors that include the level of resources and existing supports as well as the number of students served, and the level of individual support provided. Programs may be staffed by disability service personnel who commit a certain percentage of their time to providing specialized ASD supports, through both direct-service and collaborations with other departments. Some programs utilize a primary ASD program coordinator along with a staff of graduate assistants or undergraduate student volunteers, while others utilize specially-trained permanent staff. In all cases funding or

One of the best ways to improve the experience for students with ASD is through a shift in campus climate.

the allocation of resources necessary to provide support for students with ASD needs to be considered with an eye on efficiency. It is important to keep in mind that, in some cases, existing campus resources and staff may already provide fully adequate support services and the utilization of these existing services is not only prudent but also serves to empower students with ASD to utilize support consistent with the general campus population.

Staffing models should also allow for variance, as students' needs may be more intensive at different stages of their college career (e.g., the initial transition into the college environment and preparation for employment desired post-graduation). It is important to remember that program staff will need to be available to support faculty/staff seeking input and advice throughout the academic year. Finally, it is important to ensure that staff have appropriate educational backgrounds and experience. Strong candidates may have previous work in social work, counseling, special education or other related fields. Additional training specific to campus requirements, services, and campus and program philosophies will further enhance staffing success.

Program Funding

As is the case for most support services, allocating sufficient resources is the responsibility of the college. The funding sources of existing college programs vary and may consist of any combination of federal or foundation grants, endowments, student fees, and institutional support. Programs may be initially supported by a grant and later become self-sufficient via implementation of program fees or fundraising efforts. Scholarships can be created by sponsors, and other financial resources which can help cover program fees, such as vocational rehabilitation agencies, can be researched. Students can be directed on how to apply for additional financial support. A sliding scale fee may also be an important means of allowing access to all socioeconomic groups.

In addition to identifying overall program funding sources, it is also important to consider potential ways to meet staffing expenses. In some cases, oversight of services, indirect or direct, may be managed by staff as part of their existing role, eliminating the need for dedicated staff at incremental costs. As the scope of services increases, the need for dedicated and/or specially trained staff may also increase. In these cases, the use of graduate students from appropriate programs of study (e.g., school psychology, social work, special education) or adjunct professionals may be effective in serving small populations of students. Larger initiatives or comprehensive programs will likely require permanent, dedicated staff lines and matched funding. Shifting to this level of institutional support will require commitment at the leadership level by decision-makers who see the value of these programs and have the ability to designate funding.

Providing proactive supports to students with ASD allows the university to use resources in a more intentional way

Evaluating Program Success

Ongoing evaluation is important for continual improvement and to ensure program goals are being met. Additionally, students, parents, or other funders need to know that the services are beneficial. Multiple sources of feedback allow for the consideration of different perspectives: students, parents, the university community, and other stakeholders. This can be helpful, as students aren't always the best self-reporters or may lack awareness of the impact of some supports.

To maintain administrative support over time, as well as to provide concrete feedback to stakeholders, quantitative feedback is essential. Changes in persistence rates (number of students who use the program and are either retained or graduate) in relation to those of the overall student population, can provide a clear picture of program success, as can graduation and employment rates. Other success indicators may include increasing scores in measures of student competencies, adjustment, and well being.

However, certain challenges can arise when measuring success. The value-added from program supports is often represented by qualitative variables that are difficult to empirically measure. For example, it is difficult to quantify a student's improvement in managing sensory integration issues. Also, graduation rates may not necessarily reflect a successful outcome for this group of students: some may transfer to other institutions that are a better fit, some may find fulfilling employment before graduating; while still others may graduate without being able to secure employment due to limitations in social and emotional functioning. In other words, student success may not be consistent with the institutions typical measures of success. This can be problematic if funding is perceived as coming at the expense of other programming. Therefore, it is important to intentionally align program evaluation with both university and stakeholder objectives, particularly when taxpayer or tuition dollars are being used for funding.

Regardless of the current situation on your campus, this guide was developed to provide a basis for information and reflection about how to best serve students with ASD in your environment. We encourage you to utilize the Support Model Planning Worksheet in the next section and refer to the Existing Program summaries provided at the back of this guide as you apply this information to your specific campus community.

Changes in persistence, graduation or employment rates for students with ASD can provide a picture of program success.

<u>**Campus Profile**</u>

- What is the size of your campus (total enrollment)?
- What is the estimated size of your population of students with ASD?
    - Identified
    - Not-Identified (best estimate)
- Are there a growing number of students with ASD on your campus? What is the rate of growth?

<u>**Existing Services**</u>

- What is the distribution of graduate versus undergraduate students with ASD? Existing Services
- What services currently exist on your campus to support ALL students in the transition to college (e.g., orientation, first year programs)?
- What services currently exist on your campus to support ALL students in persistence to college (e.g., academically, socially, residentially)?
- What services currently exist on your campus to support ALL students in the transition to the workforce (e.g., internships, career preparation, job placement)?
- What services currently exist on your campus that serve students with ASD in an indirect manner (e.g., professional development/training, awareness programming, campus experts)?
- What services currently exist on your campus that serve students with ASD in a direct/targeted manner (e.g., coaching/mentoring, social skills groups in counseling services, disability services)?
- What is the current level of experience among your professional staff in supporting students with ASD (e.g., academic advisors, residential staff, counseling center staff)?
- How prepared are your faculty to support students with ASD in the classroom?
- How strong is the support from the general campus community regarding the need for targeted supports for students with ASD? How might additional support be garnered prior to advancing programmatic initiatives?
- How strong is the potential buy-in from decision makers regarding targeted supports for students with ASD? How might additional support be garnered prior to advancing programmatic initiatives?

<u>**Prevailing Challenges**</u>
- Considering the prevailing challenges or issues currently being experienced with or around students with ASD, what skill sets (or domains) are presenting the greatest challenge for students with ASD on your campus?
    - Executive Functioning
    - Academic Skills
    - Self-Care
    - Social Competence
    - Self-Advocacy
    - Career Preparation
    - Other

<u>**Considering a Campus Response**</u>
- What level of response are you seeking to achieve at this time?
  - o Awareness and acceptance programming
  - o Faculty/Staff professional development specific to students with ASD
  - o Extend existing services to meet a more specialized need
  - o Develop targeted services for students with ASD
  - o Develop a comprehensive program service model for students with ASD Action Planning

Regardless of institutional goals, it is strongly recommended that planning begin with the establishment of a task force. Once formed, this work group may draw upon the campus profile, existing services and prevailing challenges sections above to determine short and long term goals for your campus. Based on these goals, the sections below will help guide the work group in decision-making related to priorities and implementation plans. These sections map to the earlier resource guide materials (as indicated). It may be helpful for the task force to review this material as they consider campus responses. Additionally, the task force may find it helpful to refer the Existing Comprehensive Program Models (pg.)section of this guide as an additional reference.

Task force development
- Who are the potential change agents on your campus?
- Who could be involved in an initial and ongoing task force?
- What department(s) or personnel might take a leadership role?

Issues related to disclosure
- How will your campus handle issues of disclosure related to campus professionals?
- How will your campus handle issues of disclosure related to students?

Opportunities for indirect impact
- What steps could your campus take to increase Awareness and Acceptance?
- What steps could your campus take in Training the Campus Community?
- What steps could your campus take to Develop Campus Expertise?
- What steps could your campus take to Enhance Existing Programs and Services?
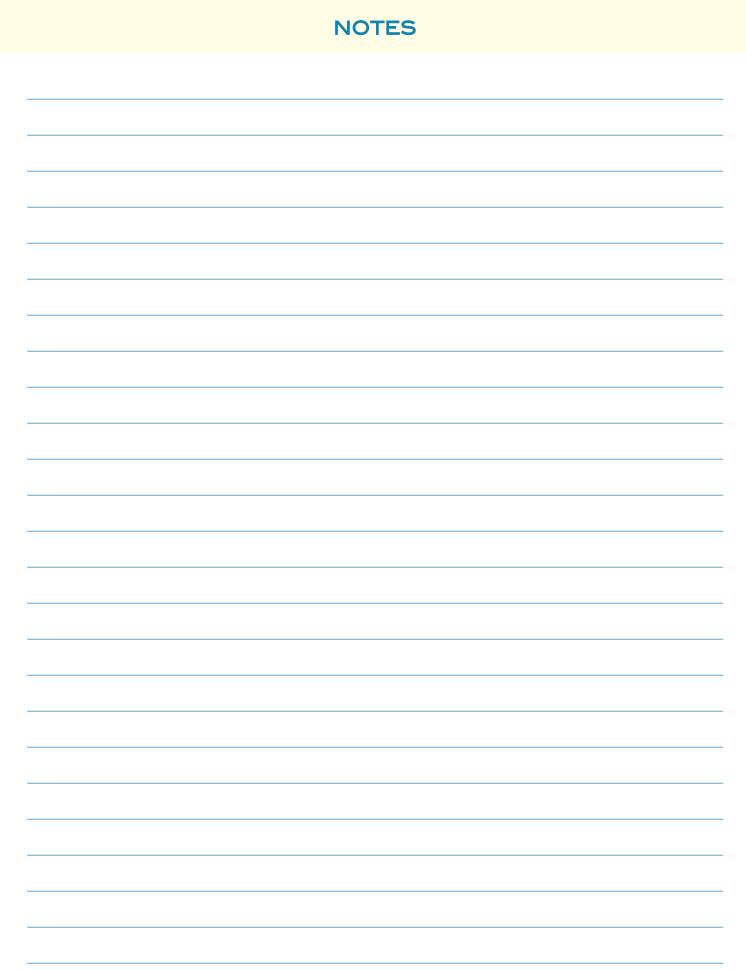
Opportunities for direct impact
- Based on the challenges presented by the population of students with ASD on your campus, would Coaching and Mentoring services be a priority? If so, what resources are available or would be required?
- Based on the challenges presented by the population of students with ASD on your campus, would Targeted Skill Development services be a priority? If so, what resources are available or would be required?
- Based on the challenges presented by the population of students with ASD on your campus, would Summer Transition Programming services be a priority? If so, what resources are available or would be required?
- Based on the challenges presented by the population of students with ASD on your campus, would Supportive Living services be a priority? If so, what resources are available or would be required?
- Based on the challenges presented by the population of students with ASD on your campus, would Student Empowerment efforts be a priority? If so, what resources are available or would be required?
- Based on the challenges presented by the population of students with ASD on your campus, would Social Programming services be a priority? If so, what resources are available or would be required?

Further considerations for the development of a comprehensive program

If the needs and resources identified merit consideration of a comprehensive support program, the following areas will require serious discussion and development.

- Based on the size and scope of the program you are considering and the resource availability, what policies and procedures might you consider for an *Admission Criteria and Intake* Process?
- Based on the size and scope of the program you are considering, what resources can you utilize for *Program Staffing* and what training and supervision will be required to support this model?
- Based on the size and scope of the program you are considering, what *Program Funding* source can you pursue to support the initiative?
- What external resources (e.g. funding agencies) might be available to support a program or it's participants?
- Based on the model you develop and the stakeholders in your program, how will you *Evaluate Program Success?*

NOTES

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Please note: Institutional data reflects data from 2013-14 academic year.

Eastern University

Private/Public: Private Undergraduate Population: 2541

Graduate Population: 1463

Average SAT scores for newly admitted freshmen: 1044

Average ACT scores for newly admitted freshmen: 22

Highest enrolled undergraduate majors: Psychology, Early Childhood Education, Social Work, Youth Ministry, and Management

Percent of enrolled UG students living on campus: 92% entering students, 73% returning students

Percent of enrolled UG students eligible for Pell Grants: 47%

Number of enrolled UG students registered with disability support office: 100

Number of enrolled UG students registered with disability support office with a documented ASD: 9

Program Name: College Success Program (CSP)

Program Housed Under: Cushing Center for Counseling and Academic Support

Program Mission: The College Success Program for Students Living with Autism Spectrum Disorder provides targeted support, practical knowledge, and cultural awareness to students living with Autism Spectrum Disorder and to the community of Eastern University. The mission is confirmed and celebrated when students living with Autism Spectrum Disorder have equal access to an undergraduate education in the College of Arts and Sciences, can successfully participate in the academic, residential, and social realms of the University, and can fulfill the greater mission of Eastern University.

Year Initiated: 2012

Program Enrollment: 6

Limited New Admits per Year: 12

Sources of Funding: Participant Fees

Staffing: One full time coordinator and one part time administrative assistant. Two graduate mentors who receive a grant to cover tuition, room, and board. Four undergraduate mentors who receive a stipend.

Program Website: http://www.eastern.edu/student-life/academic-support-counseling-and-disability-services/college-success-program

Mercyhurst University

Private/Public: Private

Undergraduate Population: 2680

Graduate Population: 331

Average SAT scores for newly admitted freshmen: 1604

Average ACT scores for newly admitted freshmen: 25

Highest enrolled undergraduate majors: Business, Intelligence Studies, Sports Medicine, Criminal Justice, and Education

Percent of enrolled UG students living on campus: 93% freshmen, 68% of all undergraduates

Percent of enrolled UG students eligible for Pell Grants: 31%

Number of enrolled UG students registered with disability support office: 175

Number of enrolled UG students registered with disability support office with a documented ASD: 27

Program Name: Asperger Initiative at Mercyhurst (AIM) Program Housed Under: Learning Differences

Program Program Mission: The mission of AIM is to educate college students living with an Autism Spectrum Disorder in a program that equally emphasizes academic and social competency to build skills for academic and vocational success.

Year Program Initiated: 2008

Program Enrollment 2013: 22 (21 live on campus)

Limited New Admits per Year: 6-9 students

Sources of Funding: Participant fees, institutional funding and other funding.

Staffing: 1 full time director, 2 part time university employees, and 2 student workers (paid and/or receive college credit).

Program Website:

http://www.mercyhurst.edu/admissions/learning%20differences%20program/asperger%20initiative

Rochester Institute of Technology

Private/Public: Private

Undergraduate Population: 15,410 Graduate Population: 2,882

Average SAT scores for newly admitted freshmen: 1784

Average ACT scores for newly admitted freshmen: 28

Highest enrolled undergraduate majors: Two largest colleges by enrollment are Golisano College of Computing and Kate Gleason College of Engineering, which offer a variety of degrees in fields of Computer and Information Sciences, as well as Engineering

Percent of enrolled UG students living on campus: 95% of freshman, 55% of all undergraduates

Percent of enrolled UG students eligible for Pell Grants: 30.6% (full-time first-time bachelor degree seeking freshmen)

Number of enrolled UG students registered with disability support office: 777

Number of enrolled UG students registered with disability support office with a documented ASD: 85

Program Name: Spectrum Support Program (SSP)

Program Housed Under: Student Learning Support and Assessment

Program Mission: Provide service to the RIT community in order to support the success of students on the autism spectrum. Direct support of students on the autism spectrum across major social and academic domains as well as impact campus culture through training, advocacy and collaboration with campus community.

Program Initiated: 2008

Program Enrollment 2013: 48

Limited New Admits per Year: No Limit-May limit new admits after start of fall term

Sources of Funding: Participant Fees and Institutional Funding

Staffing: 1 full-time director, graduate students as paid mentors, as well as contracted adjuncts in the positions of case managers, EF coaches, and seminar instructors.

Program Website: http://www.rit.edu/studentaffairs/ssp/

RUTGERS
UNIVERSITY | NEW BRUNSWICK

Rutgers University—New Brunswick

Private/Public: Public

Undergraduate Population: 33,901

Graduate Population: 14,135

Verbal-581; Math-631; Writing-596

Average SAT scores for newly admitted freshmen: Verbal: 581; Math: 631: Writing: 596 '

Average ACT scores for newly admitted freshmen: Not Available

Highest enrolled undergraduate majors: Business Management, Pharmacy, Nursing, Communications, and Biological Sciences.

Percent of enrolled UG students living on campus: 47.5%

Percent of enrolled UG students eligible for Pell Grants: 9,810 received Pell grants in Fall 2013, 30%

Number of enrolled UG students registered with disability support office: 1200

Number of enrolled UG students registered with disability support office with a documented ASD: Not available

Program Name: College Support Program (CSP) Program Housed Under: Rutgers Health Services-Counseling, Alcohol and Other Drug Assistance Program & Psychiatric Services (CAPS)

Program Mission: The College Support Program for Students on the Autism Spectrum (CSP) is dedicated to helping students develop skills and strategies to successfully participate in all areas of University life. The CSP is an integrative and collaborative program that helps students to establish and pursue individualized, behaviorally targeted goals to successfully navigate challenges faced at the University level. Under the direction of Rutgers University-Health Services-Counseling, Alcohol & Other Drug Assistance and Psychiatric Services (CAPS), the College Support Program provides community education to promote a University environment that is both supportive and inclusive.

Program Initiated: 2009 Program Enrollment 2013: 11

Limited New Admits per Year: Varies depending on resources

Sources of Funding: Participant Fees and Institutional Funding

Staffing: One full-time program coordinator and undergraduate volunteer mentors

Program Website: http://rhscaps.rutgers.edu/services/autism-spectrum-college-support-program

University of Tennessee at Chattanooga

Private/Public: Public

Undergraduate Population: 10,297

Graduate Population: 1,377

Average SAT scores for newly admitted freshmen: Not Available

Average ACT scores for newly admitted freshmen: 23.2

Highest enrolled undergraduate majors: Chemistry, Engineering, Psychology, Health & Human Performance, and Early Childhood Education Percent of enrolled UG students living on campus: 32%

Percent of enrolled UG students eligible for Pell Grants: Not Available

Number of enrolled UG students registered with disability support office: 1246

Number of enrolled UG students registered with disability support office with a documented ASD: 49

Program Name: MoSAIC

Program Housed Under: Disability Resource Center

Program Mission: Mosaic Program is a holistic program designed to support, educate and challenge the personal and academic development of college students with Autism Spectrum Disorders. Through developing a strong and accepting community in which students are offered structure, students are en couraged to learn together, support each other, and take risks, in the hopes of developing highly qualified graduates who are ready to enter the competitive work force.

Program Imitated: 2009 Program Enrollment 2013: 39

Limited New Admits per Year: 10

Sources of Funding: Participant fees, grant funding, foundation/gift funding, and fundraising

Staffing: One full-time director of Disability Services who devotes partial time to the program, 40 student workers (receive college credit/volunteer)

Program Website: http://www.utc.edu/disability-resource-center/mosaic.php

University of West Florida

Private/Public: Public

Undergraduate Population: 10,158

Graduate Population: 2,430

Average SAT scores for newly admitted freshmen: 1029

Average ACT scores for newly admitted freshmen: 23

Highest enrolled undergraduate majors: Not Available

Percent of enrolled UG students living on campus: 20%

Percent of enrolled UG students eligible for Pell Grants: Not Available

Number of enrolled UG students registered with disability support office: 450

Number of enrolled UG students registered with disability support office with a documented ASD: 27

Program Name: Autism Inclusion Program (AIP)

Program Housed Under: Student Disability Resource Center

Program Mission: To provide the highest level of support to college students with Autism in a program that equally emphasizes academic and social competency. The goal of the AIP is to enhance the college experience of UWF students with Autism by offering programs that support academic, social, life skills, and career preparation while also serving as a platform for social involvement in extracurricular activities.

Year Initiated: 2010

Program Enrollment 2013: 22 (12 residential)

Limited New Admits per Year: No limit

Sources of Funding: No official budget

Staffing: Director of Student Disability Resource Center denotes a portion of time to program, along with a graduate assistant.

Program Website: http://uwf.edu/offices/case-management/autism-inclusion-program/autism-inclusion-program/

Western Kentucky University

Private/Public: Public

Undergraduate Population: 18,115

Graduate Population: 3,009

Average SAT scores for newly admitted freshmen: Not Available

Average ACT scores for newly admitted freshmen: 22

Highest enrolled undergraduate majors: Elementary Education, Nursing, Biology, Interdisciplinary Studies, and Management

Percent of enrolled UG students living on campus: 29%

Percent of enrolled UG students eligible for Pell Grants: 43%

Number of enrolled UG students registered with disability support office: 473

Number of enrolled UG students registered with disability support office with a documented ASD: 51

Program Name: College and Circle of Support

Program Housed Under: Kelly Autism Program

Program Mission: The Kelly Autism Program's mission is to provide an educational, social and supportive environment so that individuals diagnosed with Autism Spectrum Disorder can achieve their potential as productive, independent, and employable community citizens.

Year Imitated: 2005 Program Enrollment 2013: 41 (40 in residential housing; 1 at home)

Limited New Admits per Year: 10

Sources of Funding: Participant fees, grant funding, and institutional funding.

Staffing: Three full-time employees, three part-time employees, and 12 student workers, who are paid and/or receive college credit.

Program Website: http://www.wku.edu/kellyautismprogram/collegeandcircleofsupport.php

December 2014

R·I·T   Rochester Institute of Technology

Benchmarks of Effective Supports
for
College Students with Autism Spectrum Disorder

The *Benchmarks of Effective Supports for College Students with Autism Spectrum Disorder* ASD) is an assessment tool with which to determine the readiness of specific institutions of higher learning to support the academic, social, and independent living needs of students diagnosed with ASD. Place an "*X*" in the column that best describes the availability of each specific support listed. A section to list specific items or needs necessary for making supports fully available exists, as does a section for "Notes" on the final page.

Campus Living Supports Effective Services May Include:	Supports N/A To My Needs	Supports Not Available	Supports Partially Available	Supports Fully In Place	Specific Items Or Needs To Make Supports Fully Available
1. Dedicated finances and on-campus resources for supporting students with ASD					
2. On-campus expertise regarding ASD and the supports necessary for an effective college experience					
3. Professionals or paraprofessionals who assist with the development of on-campus social networks					
4. Professionals or paraprofessionals who assess and teach independent living skills					
5. Mentoring services that support organizational needs, such as: goal setting, meeting deadlines, chunking assignments, planning for off-campus travel, etc.					
6. Mentoring services that assist students in recognizing a need for self-advocacy, and to support skill development for carrying out the activity					
7. Professionals or paraprofessionals who facilitate social learning and skill development					

Academic Supports Effective Services May Include:	Supports N/A To My Needs	Supports Not Available	Supports Partially Available	Supports Fully In Place	Specific Items Or Needs To Make Supports Fully Available
1. Access to basic academic adjustments and reasonable modifications (i.e. extended time on tests, note taking services, etc.) necessary for success in the classroom					
2. Professionals available to provide information, support, and assistance to faculty and academic staff					
3. Existing systems dedicated to teaching self-advocacy and disclosure skills necessary for positive academic outcomes					
4. Professional or paraprofessional staff available to provide assistance with academic organization, guidance, and mentoring					
5. Existing systems that provide specialized assistance to instructors, staff, and other college personnel to aid or improve academic outcomes					
6. An on-campus support program that provides traditional academic accommodations, but recognizes the importance of delivering supports for identified non-academic needs					

Non-Academic Supports Effective Services May Include:	Supports N/A To My Needs	Supports Not Available	Supports Partially Available	Supports Fully In Place	Specific Items Or Needs To Make Supports Fully Available
1. Professional or paraprofessional staff available to teach skills necessary for social networking					
2. Professional or paraprofessional staff available to teach, and mentor the development of, social communication skills					
3. Professional or paraprofessional staff available to provide assistance with identifying available on-campus and off-campus resources					
4. Professional or paraprofessional staff available to provide assistance with learning or improving independent living skills					
5. Mental health professionals trained to provide assessment, counseling, and other therapeutic services to students with ASD					

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Academic and Campus Accommodations that Foster Success for College Students with Asperger's Disorder

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Abstract

Although the prevalence of autism spectrum disorders (ASD) has risen significantly since first described in the 1940s, there is a dearth of information in regard to effectively supporting the classroom instruction and navigation of campus society for students with Asperger's Disorder, and how to support their navigation of a campus society. This qualitative study explores factors needed to provide effective supports to college students diagnosed with this disorder. Investigators convened a panel of experts to provide input on the topic, and then used a Delphi surveying method to categorize common themes identified by panel members. The findings resulted in the creation of the Best Practices Checklist for On-Campus Supports of Students with ASD in Higher Education checklist. The information gleaned should be of value for those in higher education whose students may have ASD and for the school leaders they prepare.

Background

Autistic Disorder, Asperger's Disorder and Pervasive Developmental Disability Not Otherwise Specified (PDD NOS) are psychological conditions commonly described as autism spectrum disorders (ASDs), a term that suggests flexibility regarding impairment within this continuum. Research demonstrates that while indivi-duals diagnosed with ASDs experience a "disruption in development [that] occurs across multiple areas of functioning" (VanBergeijk, Klin & Volkmar, 2008, p. 1360) those diagnosed can range from mildly to profoundly affected by the disorder. The prevalence of ASDs has increased significantly since the disorders were first described in the 1940s by doctors Leo Kanner and Hans Asperger. The Centers for Disease Control currently reports the prevalence in the United States at 1:88 children (http://www.cdc.gov/ncbddd/ autism/data.html). Males are affected at a rate five times greater than females: 1 in 54 boys are diagnosed with an ASD, while 1 in 252 girls are affected.

In contrast to Autistic Disorder, individuals diagnosed with Asperger's Disorder (commonly called Asperger's Syndrome) develop language and communication skills along typically expected milestones and experience no clinically significant delays in adaptive functioning or cognitive abilities, with the exception of skills used for social interaction. Indeed, those with AS often have well developed vocabularies and "may possess cognitive abilities similar to neurotypical or gifted individuals" (VanBergeijk, et al., 2008, p. 1359).

Despite pervasive and often debilitating social, emotional, and communication challenges that exist within the autism spectrum, evidence suggests many individuals with ASDs have the intellectual capacity to learn within a mainstream educational environment (Huckabee, 2003) and many may be intellectually gifted (Huber, 2008). Some with Asperger's Disorder may be attracted to careers that can be reached only though the completion of academic study at an institution of higher learning (Baron-Cohen, Wheelwright, Burtenshaw & Hobson, 2007). Indeed, the obsessive, fixed interest symptomatic of the disorder provides the focus for intense, rigid study and the ability to grasp narrow expertise of a specific subject (Farrell, 2004).

Evidence suggests that in 2008 there were "between 284,000 and 486,000 individuals"

(VanBergeijk, et al., 2008, p. 1359) under the age of 20 diagnosed with milder forms of ASDs potentially preparing to enter American colleges and universities. The increasing prevalence may create significant difficulties for colleges and universities unprepared for a growing number of students who have the intellectual ability necessary to enter college, but lack the social and cognitive organization skills necessary to graduate. The success-ful support of college students with more traditional physical or learning disabilities is well represented in education research and literature (Johnson, Zascavage, & Gerber, 2008; Wolf, Brown, & Bork, 2009). There is a dearth of research, however, regarding how best to support college students with AS (VanBergeijk, Klin & Volkmar, 2008).

Purpose and Significance

The purpose of this study was to explore elements needed to provide effective academic, social, and inde-pendent living supports to college students diagnosed with Asperger's Disorder. Specifically, researchers were interested in investigating the pedagogical and social accommodations necessary for an effective college experience for this student population. It was anticipated that a deeper understanding of the education and support needs associated with Asperger's Disorder would benefit individual college students diagnosed with the disorder and the faculty and staff within higher education who must instruct and support them.

Methods

This qualitative study explored the phenomenon of providing effective instruction and support to college students diagnosed with Asperger's Disorder, especially those issues related to their access and supports that address needs specific to their disorder. The research questions were:

1. What challenges do experts in supporting college students with Asperger's Disorder anticipate *most* students diagnosed with the disorder will experience on a traditional college or university campus?
2. What supports do experts in supporting college students with Asperger's Disorder

anticipate *most* students diagnosed with the disorder will require for success on a traditional college or university campus?
3. Do experts believe traditional "academic adjustments and reasonable modifications" commonly found in higher education meet the needs of *most* college students diagnosed with Asperger's Disorder?
4. What do experts in supporting college students with Asperger's Disorder report as barriers to providing necessary classroom and academic accommodations to college students diagnosed with the disorder?
5. What do experts in supporting college students with Asperger's Disorder report as barriers to providing necessary non-academic supports (on campus, but outside the classroom) to college students diagnosed with the disorder?

Through purposive sampling, ten experts were identified and invited to participate in an open-ended survey. Invited panelists were selected from diverse backgrounds; each, however, had extensive knowledge of autism spectrum disorders and professional experience in supporting college students with Asperger's Disorder. Panel members included college professors, autism researchers, disability support coordinators in higher education, and individuals diagnosed with Asperger's Disorder who hold college degrees and who speak publically on the subject of autism-specific supports within higher education. Panelists were invited to participate by blind email. Seven of the ten agreed to participate. A description of panel members is included in the *Settings and Participants* section of this paper.

A Delphi protocol was designed to solicit information from panel members in multiple rounds until a consensus was reached among them. Investigators anticipated three rounds of surveys; however, only two rounds were necessary before consensus was reached. Round 1 of the survey (Attachment A) consisted of five questions that gathered opinions on: (1) the most common challenges students with Asperger's Disorder typically face in college, (2) the type of assistance

most commonly needed to effectively support college students with Asperger's Disorder, (3) the effectiveness of traditional disability services in higher education for students with Asperger's Disorder, (4) barriers to effective academic supports, and (5) barriers to effective non-academic supports.

Data received from Round 1 were organized into common themes, placed into a matrix (Attachment B) and then sent to panel members who were asked to either "agree" or "disagree" with results that emerged from that round. Panel members who disagreed were asked to explain their contention in detail. Round 2 of the survey (Attachment C) also provided the opportunity to provide new or clarifying information about each data category. More detailed information about this analysis is provided in the data collection and analysis section.

Setting and Participants

The exchange of surveys and responses took place electronically via email. Panel members included disability service professionals employed in higher education; noted researchers and autism professionals; college faculty with experience teaching or supporting students diagnosed with AS; and individuals diagnosed with autism spectrum disorders who have a public, national reputation (through authoring books or articles on the subject) for expertise regarding this phenomenon. A description of individuals who participated as panel members follows.

Participant 1: The director of a university-based autism service program and clinic that specializes in the support of college students with Asperger's Disorder.

Participant 24: The director of a university-based program that specializes in supporting and educating individuals with autism spectrum disorders across the lifespan, and has extensive experience developing support programs for college students with Asperger's Disorder.

Participant 5: The director of an educational program for individuals with autism spectrum dis-orders. Participant 5 has a national reputation for expertise on the topic of adult services for individuals with Asperger's Disorder. Participant 5 agreed to participate, and replied with responses to Round 1.

Participant 47: An author, former university faculty member, and public speaker diagnosed with Asperger's Disorder.

Participant 58: A university faculty member, author, and public speaker diagnosed with Asperger's Disorder.

Participant 69: A disability services employee within higher education who has experience developing supports for college students with Asperger's Disorder.

Participant 710: A disability services employee within higher education who has experience with developing supports for college students with Asperger's Disorder.

Three additional individuals — a university faculty member and author diagnosed with an ASD, a director of a statewide autism support program, and a person who has publically disclosed a personal diagnosis of Asperger's Disorder and who directs an organization dedicated to teaching self-advocacy skills to the population — were invited but declined to participate in the study.

Data Collection and Analysis

Panel members were asked to complete each Delphi survey round by specific dates and reply electronically with answers to investigators. Data from Round 1 were organized per question, and an emergent category analysis was performed. Categorized responses were then ranked from "Most Cited" to "Least Cited" among the panel.

Two investigators independently analyzed each categorized response, and then compared out-comes to ensure a reliable interpretation of data. Disagreement occurred surrounding the

organization of responses of the terms *self-advocacy* and *disclosure*. One investigator interpreted the terms as a significant topic deserving of a stand-alone category. A second investigator interpreted the relevance of the terms to be contained within the context of other topics that addressed symptoms, such as *executive functioning* or *communication challenges*. Due to the prevalence of the terms in the responses from panelists, however, a decision was reached to make *Self-Advocacy and Disclosure* a separate and distinct category. Responses from panel members and the emergent categories that resulted are:

Challenges most students with Asperger's Disorder will experience on a traditional college campus

Panel members suggest a variety of challenges that exist for most college students diagnosed with Asperger's Disorder, with the majority of those challenges being outside the traditional "academic," environment. Types of challenges identified by panel members, from most-to-least cited responses are: *social interactions with peers and professors, executive functioning challenges* (particularly in regard to time management and academic organization), *social communication challenges* (especially in understanding and using the pragmatics of language), *dorm life and independent living*, (hygiene problems or roommate issues), *dining hall* and *food preference issues, difficulty working in groups*, and challenges involving *self-advocacy* and *disclosure* of their psychological diagnosis.

Themes that emerged from these responses indicate most college students diagnosed with Asperger's Disorder will experience: (1) academic challenges, (2) social challenges, (3) communication challenges, (4) independent living challenges, (5) challenges with cognitive organization, and (6) challenges with self-advocacy and disclosure.

The supports most college students with Asperger's Disorder will require to be successful

The ability to recognize and access "resources" and "information" were key components to the supports panel members believed integral to college success. Needs identified, in most-to-least cited order, were: *a responsive disability services office, assistance with executive functioning elements necessary for the typical college lifestyle* (such as calendar and scheduling support, assistance with organization of assignments, and help with preparation for assignments and exams), *assistance with social interaction and participation* (especially professionals who can model correct social skills, or provide assistance in learning new social skills), *assistance with identifying campus resources* (such as school based clubs, organizations, and tutoring services), and *access to effective counseling services* (to help reduce anxiety and develop stress management strategies).

Emerging themes believed necessary for successful supports were: (1) access to basic academic adjustments and reasonable accommodations, (2) service personnel to provide direct academic assistance and/or advice, (3) service personnel to provide direct social assistance and/or advice, (4) assistance with identifying campus resources, and (5) mental health services.

Assessing the ability of traditional disability services to meet the needs of students with Asperger's Disorder

Panel members voiced strongly that traditional disability services on modern college campuses do not meet the needs of students diagnosed with Asperger's Disorder, with six of the seven panel members replying "No" to this specific survey item. Comments about this item were categorized into two groups: *traditional accommoda-tions tend to be academically related* (extended time on exams, etc.) *assistance is needed in regards to clarification and interpretation of test questions and academic assignments*. The latter seemed directly tied to communication and language difficulties symptomatic of ASD.

Panel members suggest the needs of students with Asperger's Disorder differ greatly from the historical and traditional focus of disability services in higher education. Emergent themes were: (1)

characteristics of this disorder require a greater need for social supports than is provided by traditional disability services, and (2) *the language challenges associated with the disorder requires a specialized delivery of information to the student.* Some panel members opined that traditional disability services can be helpful; however social based supports are of a greater need than academic based supports.

Barriers that prevent necessary classroom and academic accommodations

The misunderstanding and misinterpretation of symptoms, along with a general lack of knowledge about the disorder, appears to be primary barriers to effective academic accommodations. In most-to-least cited order, panel members report the *lack of understanding* about the needs of students diagnosed with Asperger's Disorder, the fact that *social needs are often unforeseen* because of the strong academic competence, and that *intelligence often masks the social needs* of those in this student population as three of the top four barriers to academic accommodations. Acknowledging that dedicated resources (including dedicated professional staff) are necessary for students with this disorder, panel members' second most mentioned barrier to providing academic accommodations was *limited resources and space* within disability or support offices.

Themes that emerged as barriers to effective academic accommodations were: (1) *knowledge of and about the disorder,* (2) *finances and available resources of traditional disability office,* (3) *too strong an emphasis is placed on academic ability by college faculty and staff, with too little emphasis placed on social ability,* and (4) *self-advocacy skills of student to request academic accommodations and the decision on disclosing the diagnosis to administrative staff and professors.*

Barriers that prevent necessary non-academic supports to college students with Asperger's Disorder

Panel members expressed a variety of reasons that effective supports may be prevented from occurring outside the classroom. Those reasons include: the *expense of hiring staff,* and the general *lack of staffing* to provide necessary supports, *negative attitudes and perspectives of faculty and administration towards students with Asperger's Disorder,* and a *lack of knowledge of the non-academic needs of support for this population.*

Themes that emerged in this category were: (1) *finances and resources of traditional disability office,* (2) *attitudes of faculty and staff on campus,* (3) *lack of knowledge among college faculty and staff about non-academic needs,* and (4) *student self-advocacy for non-academic related accommodations and decisions on disclosure of diagnosis.*

Once themes were categorized, investigators developed a matrix to illustrate how individual responses from panelists fit themes that emerged from the group (Attachment B). That matrix, a brief analysis of initial findings, and Round 2 of the Delphi Survey were then sent to panel members. Round 2 of the survey asked panel members to "agree" or "disagree" with the results, and provided each an opportunity to add or clarify information.

Four of the six panel members who responded to the Round 2 survey agreed with the results. Participant 7 added "Self-Advocacy and Disclosure likely pose as a top challenge" to the sections *Challenges to Campus Living* and *Non-Academic Barriers.* Participant 4 disagreed with content in the *Challenges to Campus Living* section, stating "Communication challenges are more significant." Participant 4 also disagreed with content in the *Non-Academic Barriers* section, stating "Faculty/Staff attitudes have a greater effect."

Conclusions

Upon receiving and evaluating data from Round 1 and Round 2 of the Delphi survey, the following interpretations conclude this study:

1. *Social Challenges,* *Independent Living Skills,* and *Cognitive Organizational Skills* were mentioned as a need more often by expert panelist than was *Academic Challenges.* This suggests panelists agree that students diagnosed with Asperger's

Disorder are, generally, intellectually capable of performing in the classroom but struggle with the social and organizational aspects of the college lifestyle;

2. Resources dedicated to meeting the *Social Challenges* of students diagnosed with Asperger's Disorder are considered integral to effective college support;

3. Traditional disability services are ineffective for supporting this student population due to: (a) its historical focus on meeting academic rather than social needs, (b) its lack of resources, and (c) its general lack of expertise regarding the disorder;

4. The panel of experts connected *self-advocacy* and *disclosure* more to academic success than to other aspects of campus life;

5. *Mental health services* are identified as a necessary support for college students diagnosed with Asperger's Disorder. These services, however, were mentioned fewer times by the panelists than the need for: (a) dedicated staff with specialized knowledge to provide supports, (b) having a well-informed campus community, and (c) utilizing a well-staffed support program with expertise in the disorder. An equal number of panelists mentioned the need for having staff to teach students to *identify on-campus resources and supports*, which would generally include student mental health services;

6. The panel of experts revealed *faculty and staff attitudes* may play a role in college success for college students with Asperger's Disorder. More panelists expressed a need, however, for increased on-campus *knowledge and information* about the disorder.

7. *Finances* and *Resources* were identified by the majority of panelists as barriers to academic and non-academic success alike due to the high cost of hiring personnel with expertise.

Implications

Results of this study demonstrate that Asperger's Disorder is an enigma within higher education: the symptoms associated with the disorder—communication and socialization problems, difficulty establishing and carrying out goals, and difficulty advocating for personal needs—create significant challenges for college faculty and support staff more familiar with students who demonstrate developmentally appropriate self-direction, communication, and social skills. The tradition within higher education is to admit, instruct, and support students who exhibit the academic and social leadership skills necessary to transition into the workforce. Panel members in this study suggest students with Asperger's Disorder may suffer an on-campus attitudinal bias: attitudes about the disorder may create unwillingness to provide intensive supports, and a general lack of understanding about the disorder may lead to the development of a deeper bias.

Higher education is guided by the principle, however, that a complete college education includes life skill training, career guidance, and training students in the art of relationship building. Accreditation bodies expect colleges to support student development in social understanding and cognitive organization, the very skill set delayed in this student population. VanBergeijk et al. (2008) state colleges must "learn to address the social and organizational difficulties of this [the AS] population" (p. 1362) and suggest that failure to develop an academic culture that recognizes and accommodates those needs is equivalent to being noncompliant with the Americans with Disabilities Act.

As evidenced by this study, a lack of understanding about Asperger's Disorder within higher education creates significant barriers to delivering effective academic accommodations and support strategies. Colleges and universities would benefit greatly from hearing first-hand about the needs students diagnosed with the disorder have in higher education. Forming student panels comprised of students with Asperger's Disorder to inform college administration on policy and practice helpful to specific needs of the population would be a significant step toward a more understanding campus society. Dedicating finances and other resources to on-campus support programs with expertise in supporting students with Asperger's Disorder, modeled after the traditional TRIO

programs, for example, could assist with building a supportive infrastructure for students. And finally, the development of a best-practice checklist that outlines those supports known to be most effective with college students diagnosed with AS would be useful tool for students and family members as they interview at and visit colleges they wish to attend.

Summary

Experts who participated in this study agreed that, generally, college students diagnosed with Asperger's Disorder have the intellectual ability necessary to succeed in the college classroom. Experts also agreed that social and independent living skill deficits, along with a general lack of understanding about the disorder among college faculty and staff, are most likely the causes for failure. This study suggested traditional disability services have been ineffective in meeting the holistic needs of students with Asperger's Disorder, and that more effective supports can be provided within campus cultures that embrace diversity, recognize the importance of a well-informed campus community, and dedicate resources to this student population.

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Attachment A: Round 1 of the Delphi Survey

Thank you for taking time to complete this qualitative survey. Your knowledge and expertise on the subject of supporting students with Asperger's Disorder in college is recognized and valued, and will be helpful in determining the direction of my doctoral research on this topic.

This questionnaire serves as the initial round of a Delphi survey. Subsequent rounds (likely three rounds) developed by the answers you provide will be sent to you electronically during the next several weeks.

The five questions that make up this survey will take approximately 15 minutes to complete. Please answer in detail; then, email the competed survey as an attachment to co-investigator Rebecca Hansen. Her email address is <u>fuller26@marshall.edu</u> *Please return your response as soon as possible, but no later than <u>February 29, 2012</u>.*

1. Please describe the challenges you expect *most* students with Asperger's Disorder will experience on a traditional college or university campus.

2. Please describe the supports you anticipate *most* students with Asperger's Disorder will require to be successful on a traditional college or university campus.

3. Do traditional "academic adjustments and reasonable modifications" commonly found in higher education meet the needs of *most* college students diagnosed with Asperger's Disorder? Please explain your "*Yes*" or "*No*" answer.

4. What barriers exist to providing necessary classroom and academic accommodations to college students with Asperger's Disorder?

5. What barriers exist to providing necessary non-academic supports (on campus, but outside the classroom) to college students with Asperger's Disorder?

Attachment B: Response Matrix from Round 1 of Delphi Survey

"X" indicates the expert panelist identified this specific area issue in their survey responses

Challenges to Campus Living

Responder	Academic Challenge	Social Challenge	Communication	Independent Living	Cognitive Organization	Self-Advocacy and Disclosure
1	X	X	X	X	X	X
4	X	X		X	X	
5		X			X	
7		X				X
8	X	X	X	X	X	X
9		X	X	X	X	
10		X		X		

Most Effective Supports

Responder	Access to basic accommodations and modifications	Staff to Provide Academic Assistance	Staff to Provide Social Assistance	Assistance in Identifying Campus Resources	Mental Health Services
1	X		X	X	X
4	X		X	X	
5			X		X
7	X		X		
8		X	X	X	X
9	X				
10		X	X		

Are Traditional Disability Services Effective?

Responder	Yes	No
1		X
4		X
5		X
7	X	
8		X
9		X
10		X

Why Traditional Disability Services Are Not Effective

Responder	Has a Focus on Academics	Does Not Meet Social Needs Inherent In Disorder	Lack of understanding in how to communicate information to students
1	X	X	X
4	X		
5	X	X	
7			X
8	X	X	X
9	X		X
10	X	X	

Academic Barriers

Responder	Knowledge of AD	Finances and Resources of DSS	Weighted Focus on Academics	Self-Advocacy and Disclosure
1	X	X		X
4			X	
5	X			X
7		X		X
8	X	X	X	X
9	X	X		
10	X	X		

Non-Academic Barriers

Responder	Finances and Resources	Faculty/Staff Attitudes	Lack of Knowledge on AD's	Self-Advocacy and Disclosure
1	X		X	
4	X	X	X	
5	X		X	
7			X	
8	X		X	
9	X		X	X
10	X	X	X	

Attachment C: Round 2 of the Delphi Survey

The five themes developed from Round 1 of the Delphi survey serve as section headlines below. If you agree with the expert panelist opinions documented in the Response Matrix under that heading, simply place an "X" beside: "I agree with the panelist on this topic." If you disagree with their responses, or recognize something is missing from that section, place an "X" beside that survey item and then write in your response in the space provided. Please email your responses (by pasting them into an email or by attaching this document to an email) to Rebecca Hansen, fuller26@marshall.edu before March 23, 2012. Thank you for your participation and your expertise.

Challenges to Campus Living

_____ I agree with the panelist comments found in the Response Matrix

_____ I don't agree with the panelists comments found in the Response Matrix. I don't agree because:

_____ There is something missing, or something I'd like to add to this section of the Response Matrix. I'd like to add:

Most Effective Supports

_____ I agree with the panelists comments found in the Response Matrix

_____ I don't agree with the panelists comments found in the Response Matrix. I don't agree because:

_____ There is something missing, or something I'd like to add to this section of the Response Matrix. I'd like to add:

Why Traditional Disability Services Are Not Effective

_____ I agree with the panelist comments found in the Response Matrix

_____ I don't agree with the panelists comments found in the Response Matrix. I don't agree because:

_____ There is something missing, or something I'd like to add to this section of the Response Matrix. I'd like to add:

Academic Barriers

_____ I agree with the panelist comments found in the Response Matrix

_____ I don't agree with the panelists comments found in the Response Matrix. I don't agree because:

_____ There is something missing, or something I'd like to add to this section of the Response Matrix. I'd like to add:

Non-Academic Barriers

_____ I agree with the panelist comments found in the Response Matrix

_____ I don't agree with the panelists comments found in the Response Matrix. I don't agree because: _____
_____

_____ There is something missing, or something I'd like to add to this section of the Response Matrix. I'd like to
add: _____
_____

Attachment D: Response Matrix from Round 2 of the Delphi Survey

"X" indicates the expert panelist "Agreed" or "Disagreed" with the Response Matrix from Round 1

Challenges to Campus Living

Responder	Agree	Disagree	Missing
1	X		
4		X	Communication challenges are more significant
5			
7		X	Self-Advocacy and Disclosure likely pose as a top challenge
8	X		
9	X		
10	X		

Most Effective Supports

Responder	Agree	Disagree	Missing
1	X		
4	X		
5			
7	X		
8	X		
9	X		
10	X		

Why Traditional Disability Services Are Not Effective

Responder	Agree	Disagree	Missing
1	X		
4	X		
5			
7	X		
8	X		
9	X		
10	X		

Academic Barriers

Responder	Agree	Disagree	Missing
1	X		
4	X		
5			
7	X		
8	X		
9	X		
10	X		

Non-Academic Barriers

Responder	Agree	Disagree	Missing
1	X		
4		X	Faculty/Staff attitudes have a greater effect
5			
7		X	Self-Advocacy and Disclosure likely pose as a top barrier
8	X		
9	X		
10	X		