

Supporting Students with Autism in Higher Education through Teacher Educator Programs

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Increasing numbers of students diagnosed with Autism Spectrum Disorder (ASD) are entering institutions of higher education, and that number is expected to significantly increase over the next decade. Once thought unqualified for post secondary settings, students with ASD are meeting the requirements for admission, and institutions are faced with addressing the unique needs of these students. Specifically, transition, academic achievement, and social skills deficits can create barriers for students with ASD. This paper discusses these barriers and summarizes how departments and colleges of education can get involved in the support process.

The Centers for Disease Control and Prevention (CDC) estimate that 1 in 68 children have Autism Spectrum Disorder (ASD). This 2014 approximation is much higher than the 2000 estimate of 1 in 150. As the rate of ASD diagnosis in children increases, the number of students with autism entering institutions of higher education also increases. Colleges and universities now find themselves facing the challenge of offering resources to these students (Myers, Ladner, & Koger, 2011), and they soon find that it goes beyond what can be accomplished through their disability services. In order to meet the specific needs of ASD, professionals working in disability services have to be pioneering and forward thinking (Korbel, Lucia, & Wenzel, 2011). This includes collaborating with others across the university to provide additional support for students with ASD.

One such collaboration being utilized is with teacher education programs. Partnerships have been formed at universities such as Austin Peay State University in Tennessee, Midwestern State University in Illinois, and St. Joseph's University

in Pennsylvania to support the growing number of individuals meeting the admission requirements for institutes of higher education. This article will provide an overview of the characteristics of ASD and then examine techniques that can be used to support ASD in the areas of transition, academics, and social skills support. Each section will incorporate ways that those in teacher education programs can become involved in the support process.

Characteristics

The term "autism", which has been used for almost 100 years, is derived from the Greek word "autos" meaning "self". The term was coined based on the observation that the disorder often led to social isolation and "a powerful desire to be alone" (Kanner, 1943). Initially used to describe a subset of schizophrenia, the term autism was officially replaced by "Infantile Autism" in the 1980 publication of the Diagnostic and Statistical Manual of Mental Disorders (DSM) and again to "Autistic Disorder" in 1987. In 1994, Asperger's Syndrome was added to the DSM to expand

the spectrum to include milder cases, and both Autistic Disorder and Asperger's Disorder were included under the criteria of Pervasive Developmental Disorders (PDD). With the publication of the DSM fifth edition in May 2013, all PDD diagnoses, including Autistic Disorder and Asperger's Syndrome, were replaced by the umbrella term "Autism Spectrum Disorder".

There is no known cause of ASD, but research suggests that both genes and the environment can play a role. In basic terms, the diagnostic criteria for ASD are: 1) persistent deficits in social communication and social interaction, and 2) restrictive, repetitive patterns of behavior, interests, or activities. Deficits in social communication and interactions may involve characteristics such as little or no eye contact, resistance to being touched, difficulty understanding figures of speech or sarcasm, and difficulty reading body language. Other common characteristics are being seemingly unable to understand another's feelings, spontaneous comments, which seem to have no connection to the conversation, and difficulty understanding the rules of communication. Restrictive, repetitive patterns can include obsessions with objects, ideas, or desires, repeating the same act over and over, insisting on a routine or ritual and being resistant to change, and what is referred to as "stimming". Stimming behaviors can be noises or movements made by the individual and can include any or all of the senses. These behaviors can be displayed when the individual needs sensory stimulation, or they may occur as a way to calm the individual when they are over stimulated by sensory input. Examples of stimming are humming, pacing, hand-flapping, tapping the ears, rocking, and scratching.

Although Intellectual Disabilities sometimes co-exist with ASD, and characteristics of the disorder can create major challenges, approximately one-third of individuals with ASD meet the academic requirements to attend college (Odom & Wong, 2015). Sadly, of those

individuals attending college, only around 20% make it to graduation (Shattuck et al., 2012). It is not difficult to see that characteristics of ASD may make it necessary for an individual to overcome obstacles in the higher education environment. Not only do they often feel that they must learn to adapt to the neurotypical world in order to be successful, but too often, those in higher education create barriers by defining ASD in terms of impairments or failures, and failing to recognize the great diversity in students with ASD and the great successes that they can accomplish.

Little research exists about the number of students with ASD transitioning into higher education and the teaching of those students (Haley, 2011), thus bringing us to the first area where teacher education programs can assist. Research on autism support has typically focused on early childhood due to the potential to improve juvenile outcomes, yet adulthood makes up the vast majority of one's lifespan. Research on ASD and higher education has not been progressive over the past several decades (Taylor, 2005), yet increasing rates of autism and the rise in enrollment of students with ASD in higher education necessitate that professionals branch out to include these areas in their research. Investigation of ASD and higher education will possibly confirm what some already hold true; autism is more prevalent in higher education than most of us realize (Cowen, 2009), and supports are needed for these students from the beginning of their college careers.

Transition Support

With academic success being a top priority for retention, many universities and colleges have developed courses for first year students designed to assist in transition; conversely, these courses cater predominantly to students without disabilities (Kelley & Joseph, n.d.). Mullendor and Banahan (2005) suggest "orientation can be the defining moment in the transition to college for the student – a time in which basic habits are

formed that influence students' academic success and personal growth – and marks the beginning of a new educational experience” (p. 319).

The transition of students with ASD to higher education can be much more challenging due to life tasks that can be affected for some such as goal setting, establishing peer connections, and becoming independent (Geller & Greenberg, 2010). Kelley and Joseph (n.d.) insist “most students are not prepared to transition into the college setting. The same can be inferred for students with ASD” (p. 12). Due to the scope of areas in which students with ASD require transitional services, specialized courses for these students that include not only transition and academic assistance but also self-advocacy and social skill support can be extremely beneficial. Individuals who have spent time in K-12 classrooms, specifically those who have worked in areas related to autism or the transition of students with disabilities, can thrive as instructors of such courses, making departments and colleges of education a prime spot to house programs for students with autism.

A course designed explicitly for students with ASD can be offered at a college or university with little inconvenience. One credit hour courses are already being offered through some autism programs, and therefore curricula for courses targeting ASD already exist. Additionally, Vocational Rehabilitation and other financial assistance often cover the fees making it not only beneficial for students with ASD, but also financially accessible. Courses in transition for students with ASD provide the opportunity for them to interact with others in similar circumstances and can provide them with skills to make the transition to college go more smoothly. These courses are being added to autism programs around the country, such as MoSAIC at the University of Tennessee Chattanooga, to address independence, academics, and social skills. In addition to being beneficial to those enrolled in the class, it can benefit pre-service teachers

by offering opportunities for hands on learning experiences in the form of mentor programs, tutoring, and real world interaction.

Academic Support

Academic support begins for students with ASD in disability services where accommodations afforded by federal law can be determined. This resource is optional, and many do not take advantage of the service. One reason for this could be the anxiety associated with the disclosure of their disability to faculty members. Regrettably, faculty outlook on educating students with ASD can potentially be a barrier to successful completion of degree programs (Taylor, 2005). Some students do not disclose their disability due to the difficulty higher education personnel may have understanding the necessity of incorporating adjustments and accommodating academic preferences. This possibly stems from very little being known about ASD, or more compelling, ASD being a somewhat invisible disability. ASD is not as obvious as blindness or a hearing impairment, so faculty may have difficulty truly appreciating the struggles of students on the autism spectrum (Geller & Greenberg, 2010; Taylor, 2005). As teacher educators, many know the stigma attached to special needs and should be willing to advocate for students in the higher education setting just as they did in the K-12 setting. Disability services offers mediation in most circumstances, but departments and colleges of education have faculty qualified to offer these services as well.

An additional barrier exists in the argument that current educational practices alienate students with ASD from their neurotypical peers. Often students with ASD find it difficult to demonstrate their knowledge due to a variety of frequently encountered obstacles such as sensory issues and interpersonal difficulties (Myers, Ladner, & Koger, 2011). “Educators want to provide a good and effective experience for students with ASD, but they may not be sure where to start or what

to do” (Odom & Wong, 2015, p. 13). In an effort to guide classroom practices, teacher educators can reach out to other faculty and recommend techniques that can be used by higher education personnel such as Universal Design for Learning (UDL).

Universal Design for Learning

According to Myers, Ladner, and Koger (2011), “even students who are above grade level in terms of academic abilities frequently struggle in the classroom” (p. 516). This is in part due to the traditional lecture method that can dominate classrooms at colleges and universities. In order to increase student achievement, create positive relationships, and promote student psychosocial adjustment, additional methods of classroom instruction can be applied. Universal Design for Learning (UDL) is an approach that promotes access, participation, and progress in the curriculum for all learners (Katz, 2013). Just as universal design in the environment allows access to a variety of people (curb cuts provide accessibility to those in wheelchairs, but also to baby strollers and shopping carts), UDL in the classroom limits barriers to learning.

Reflecting the basic neurology of the brain, UDL principles address the way information is represented by the instructor, the means for expression of knowledge by students, and the means of engagement in learning (Cytowic, 1996; Gargiulo & Metcalf, 2013; Luria, 1973). Traditional instruction methods lend themselves to representing information in only one way, typically through lecture. Students are passive learners and the environment is generally quiet. Representation through UDL looks quite different. When instructors use the methods encouraged by UDL, information is presented in multiple ways. This provides access to information through numerous approaches such as visual, auditory, or tactile learning. The means of expression for students to demonstrate their learning is also altered. Traditional methods allow assessment

in only one format, which is usually a written method, thus creating barriers for many learners with and without disabilities. UDL allows for students to demonstrate skills in a variety of ways, for example, having students choose from a list of assignments. Because using multiple instruction formats and providing options increases relevance to instructional activities and encourages collaboration, there will ultimately be a more engaged classroom. When using an approach such as UDL in the higher education classroom, students at all levels go beyond passively listening to lectures and are able to actively create their knowledge, express that knowledge, and engage in learning.

Temple Grandin (2007), a university professor and industrial designer with autism, asserts that the most successful adults with autism had teachers who developed their strengths. UDL urges teachers to develop strengths through the use of an array of techniques to represent information (e.g. visual, auditory, tactile), and allowing students to use individual strengths when expressing that they have indeed met the learning goals of a lesson (oral expression versus written answers). Incorporating strengths and interests will not only enhance learning, but it will open the doors for engagement. This is especially important to those with ASD because “the very act of being engaged also adds to the foundation of skills and disposition that is essential to live a productive and satisfying life after college” (Carini, Kuh, & Klein, 2014, p. 2).

UDL requires that we not only design accessible learning, but accessible pedagogies that embrace individualism and have a broader impact on diverse populations. “Universal design is a process that enables and empowers a diverse population by improving human performance, health and wellness, and social participation” (Steinfeld, Maisel, & Levine, 2012, p. 30). This aligns with the standards of many teacher education programs making their faculty an ideal choice to provide faculty training to those

across the university on UDL and maximizing the achievement of all students. Collaboration with those who provide first year faculty trainings, organizing optional professional development in association with disability services, or working with administration to add a UDL component to required trainings are a few examples of how UDL can be promoted campus wide.

Social Skills Support

Social-communication difficulties are a core feature of ASD and are known to be both troublesome and anxiety provoking (Wenzel & Rowley, 2010). When entering institutions of higher education, students with ASD are often faced with new social interactions in an unfamiliar setting. "Social and communication challenges constitute a major concern in postsecondary education environments where individuals are expected to communicate effectively and comfortably with their peers and college faculty without supervision" (Zager & Alpern, 2010, p. 152). The academic elements of higher education may be idyllic for some, but the challenges associated with social skills can make or break the experience. In fact, Swift (2012) found that the social aspect of college for some students with ASD can be much more difficult than the academic.

Social skills are often taught through mentoring or peer-mediated interventions (Odom & Wong, 2015). Pre-service teachers are the perfect peers to work in mentoring programs for students with ASD because the relationship not only benefits the student they are working with, but they themselves will learn skills to take out into the workforce. A few skills that can be applied in a mentoring setting are task analysis, goal setting, time-management and study skill techniques, self-management skills, and perhaps most important of all, how to accept and communicate with an individual with special needs.

Conclusion

Providing assistance for students in the areas of transition, academics, and social skills can be complex, and disability service providers may find their resources stretched thin. Departments and colleges of education have an ideal pool of faculty and students who may be willing to share this responsibility and assist in providing a wealth of services for students with ASD. Swift (2012) asserts that one of the greatest challenges in higher education is getting faculty to buy into and understand working with and supporting students on the spectrum. Teacher preparation programs should be leading the way when it comes to assisting these students in higher education. After all, what better way is there to model effectively supporting a diverse population of students than to let our students see us in action?

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