Evolving from Disability to Diversity

How to Better Serve High-Functioning Autistic Students

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It is my great pleasure to join readers as the new editor of the Information Literacy and Instruction column. Librarians who specialize in reference, instruction, and other user services are regularly challenged to provide both the tools and the materials that enable patrons to find and use the information they seek. Literacy and instruction are essential components of our discipline, and I encourage you to consider how important your contributions are in helping librarians become more informed, aware, and instructed on these and other important topics. A simple Google Scholar search for "information literacy" retrieves more than 60,000 citations. Since its infancy, the term *information literacy* itself has taken on many meanings in many contexts. Today, information literacy can occur in the library, in the classroom, or in aisle seven of the grocery store. Information literacy doesn't just mean fluency; it means competency and critical thinking. Readers of our journal serve patrons in settings as diverse as public, corporate, and prison libraries, and they provide these services to individuals of all ages, races, creeds, and abilities. This column also offers readers an opportunity to learn about information literacy and instructional approaches that they can integrate into their own, unique settings. Please consider this a call not only for papers about information literacy and instruction, but also a call for our continued pursuit to better understand literacy and instruction in novel, unique ways.

Autism spectrum disorders are a prevalent diversity in users in public, academic, and special libraries. Here, guest columnists Charlie Remy and Priscilla Seaman offer a description of autism spectrum disorders and provide instructional strategies for the reference desk and the classroom. In addition, readers can learn how to refine outreach and programming to better serve these patrons. Assistant Professor Remy and Associate Professor Seaman are librarians at the University of Tennessee at Chattanooga.—*Editor*

As an increasing number of children are diagnosed with autism spectrum disorders (ASDs), those on the higher functioning end will likely pursue postsecondary education opportunities. Over the past several decades, colleges and universities have developed ways to accommodate the needs of people with visible disabilities (deafness, blindness, and physical handicaps among others), but a greater effort needs to be made to better serve those with more subtle neurological differences that can nonetheless affect a student's overall educational experience. The American Library Association's Code of Ethics states that "we provide the highest level of service to all library users

through appropriate and usefully organized resources; equitable service policies; equitable access; and accurate, unbiased, and courteous responses to all requests."[1] Developing a better understanding of the unique characteristics and needs of patrons with ASDs can result in improved reference and instruction experiences for all patrons regardless of neurology. This article will offer pedagogical strategies for the reference desk and instruction classroom, suggest outreach initiatives for this unique user population, and highlight the role of librarians working in a neurodiverse postsecondary environment.

DEFINING DISABILITY

Disabilities tend to fall into two categories: medical and sociopolitical. A disability is medically defined as a potentially limiting physical or mental condition associated with individuals that could impair activity or life supporting tasks. The sociopolitical definition views disability as the result of societal forces that limit equal opportunities and participation with others. This framework looks specifically at three societal barriers that can disable: (1) environment, e.g. accessible buildings, equipment, communication; (2) attitudes, e.g. stereotyping, prejudice; and (3) organizations, e.g. inflexible practices, policies.[2] Disabilities are further parsed into many subcategories and are defined by degree of severity. ASDs are considered a developmental disability, which falls under cognitive, mental, and emotional functioning. This class of disability is also sometimes referred to as "hidden" or "invisible" because ASD characteristics often do not manifest themselves in observable, physical ways.

HISTORICAL CONTEXT OF DISABILITIES WITHIN HIGHER EDUCATION

The Rehabilitation Act of 1973 mandates that qualifying individuals with disabilities cannot be denied benefits from institutions receiving federal funds. A section of the original law specifically addresses educational institutions, including academic libraries, requiring of them "appropriate academic adjustment." In 1990, the Americans with Disabilities Act (ADA) expanded upon the previous law, making disabilities and accessibility a greater part of our contemporary culture.[3] However, disclosure of a disability can be a difficult decision, and despite the expanded language and provisions of the ADA, the burden of disclosing and providing appropriate documentation still rests with the individual.[4] Many students with disabilities choose not to disclose because they do not want to "draw undo attention to themselves" and "would rather deal silently than disclose, even if it means they have to struggle harder."[5] Furthermore, rather than alleviating discrimination and exclusion, disclosure can risk exacerbating it.[6] This potential lack of disclosure underscores the need for libraries to holistically examine services and programs.

US Census statistics cite that approximately 18.7 percent of the population (civilian, noninstitutionalized) had a disability in 2010.[7] In 2012, the National Center for Education Statistics identified 11 percent of undergraduate students as having a disability, while 2010 findings indicate that 1 in 68 children are identified with autism, and 1 in 250 children are identified as having Asperger's Syndrome.[8] The number of undergraduate students with ASDs is unclear because the decision to disclose rests with the student. A 2005 study found that only 40 percent of postsecondary students with disabilities informed their institution of their disability.[9] Regardless of the exact number, librarians, administrators, and faculty need to maintain an awareness of this important constituency.

CHARACTERISTICS OF AUTISM SPECTRUM DISORDERS

People with ASDs are born with neurological differences that are present throughout their lives. "The brains of people with AS [Asperger's syndrome] seem to process information and sensory stimuli differently than the brains of neurotypical (NT) people."[10] It is important for librarians to note that characteristics can vary greatly from person to person, so it is difficult to profile someone with an ASD. Over time, people with ASDs can develop skills that help them adjust to living more effectively in a neurotypical world.[11] They often have a strong work ethic and find satisfaction in completing repetitive and detail-oriented tasks that others may consider boring. Many are passionately interested in niche topics within the arts, literature, languages, and sciences. These interests, for which people with ASDs invest significant amounts of time and effort, can be channeled into productive activities, which may assist in their professional development and identity beginning at the postsecondary level. The special topics may also have a considerable impact on which library resources are most relevant to ASDs and could translate into ASDs helping their classmates use and understand specific sources and classification systems more effectively. The more positive attributes of ASDs can conceal daily challenges, which can lead to unrealistic expectations on the part of others.[12]

Sensory overload can occur quite frequently for people with ASDs. Contemporary library environments can bombard us with constant stimuli, such as flickering lights, background noise, and countless other sensory distractions. Most people have filtering capabilities and may not be as sensitive to external stimuli; however, many with ASDs cannot "turn these off," preventing them from concentrating on tasks and resulting in anxiety and exhaustion. Other sources of exhaustion for ASDs come from the need to emulate neurotypical behaviors such as eye contact and tone of voice, interpreting coded language such as humor and figurative speech, and managing obsessive thoughts. Executive function, which involves problem solving, organization, and task initiation and completion, can be challenging. To ASDs, all tasks can seem to have the same level of urgency and, therefore, prioritization can be daunting. This can lead to trouble understanding the "big picture" since

they tend to get lost in the small details. Understanding others' perspectives is another area of difficulty. Some believe that people on the spectrum lack empathy, but, in reality, autistics might not easily understand or be able to process the subtle emotional cues of the other person.[13] Additional characteristics of people with ASDs may include the following:

- Adherence to rigid routines and rules
- Speech lacking tone and pitch
- Lack of eye contact or staring
- Delayed motor development
- Naivety and immaturity in certain areas and great maturity in others
- Social isolation
- Poor impulse control
- High anxiety
- Lack of a "filter" in social situations
- Slower auditory, visual, or intellectual processing
- Perfectionistic tendencies[14]

University life is more unstructured compared to the social and academic rhythm of the secondary level. Therefore, given the characteristics outlined above, college students with ASDs face many unique challenges in this new setting. Schedules contain ample free time, and courses require completion of a few large assignments instead of many smaller ones, necessitating time management skills. The expectation on the part of many faculty is that students are adults who are responsible for their own education. Libraries which have or are considering the implementation of personal librarian programs may take this opportunity to assist ASDs with the development of time management and executive function skills.

Other characteristics of students with ASDs are well suited to the university setting and enrich the discourse in a bibliographic instruction setting. Higher education values intellectual inquiry and the creation of knowledge, which can make it an ideal fit for someone with an ASD. Strengths that persons with ASDs may bring to the classroom include the following:

- Normal to outstanding intelligence
- Strong verbal skills and rich vocabularies
- A tendency to grasp meaning through intellect as opposed to intuition (helps elucidate guidelines and instructions that might be confusing to other students)
- Deep curiosity and willingness to ask critical questions
- Adept at noticing details, remembering facts
- Astute observers
- Good note-takers

REFERENCE AND INSTRUCTION: CULTIVATING AN AWARENESS

Library service to students is often a one-time experience, whether at the reference desk or teaching instruction classes. In contrast to teaching faculty, who can more readily develop a rapport with students over the semester, librarians delivering reference and instruction services may not be aware that a student has a disability even if the student has officially made it known elsewhere on campus. Further, library instructors are often not trained to serve students with disabilities.[15]

Librarians face a greater need to raise personal, professional, and library-wide awareness of ASDs so these students can be more appropriately assisted. One step librarians can take is to familiarize themselves with the disabilities literature in general, and, more specifically, with the characteristics of hidden or invisible disabilities such as autism. If a librarian recognizes a student who displays one or more common ASD characteristics, the librarian could adapt the reference interaction or teaching methodology to accommodate that student. Such accommodations could include using straightforward language, providing step-by-step written instructions, and assisting with organizational and planning skills. Library instruction trends are moving toward delivery that meets the needs of a variety of learning styles which nicely dovetails with the concept of neurodiversity and the recognition that not all brains are alike. Twenty-first century library instructors use a toolbox of multi-sensory teaching styles that target the visual, auditory, or kinesthetic learner. Library instructors often convey their content with built-in flexibility by including some lecture, demonstration, active learning, and hands-on practice. However, the student with an ASD may not be able to integrate some of the pedagogical practices into his/her learning style, just as the library instructor may not be able to modify all teaching methods to accommodate the needs of the ASD student. Therefore, mutual awareness and flexibility are the keys to a successful reference and classroom experience. The librarian must be prepared for a lack of advanced notice in most cases, but if the ASD student discloses his/her disability prior to class, more substantial accommodations can be made. Below is a list of inclusive instructional strategies that will enhance learning for ASDs and all types of students:

- Enhance content with visuals, graphs, hand-outs, and written explanations
- Assist with the formation of a focused yet broad enough research topic that will result in an easier search process
- Offer to make an appointment for a student whose needs are more complex and require more time
- Explain library classification systems, which would help with locating materials and likely interest the ASD student due to a preference for order and structure
- Provide a reflective activity, such as written worksheet, as an alternative to the social, interactive nature of active learning
- Link new information to familiar information
- Maintain the same level of expectations as with other students, yet provide reassurance to the ASD student to boost motivation and self-confidence and reduce anxiety levels

Successful teachers and librarians recognize the importance of creating an environment that is conducive to

learning, both physical and emotional. Elements of the physical environment, such as good lighting, quiet spaces, and operational equipment are especially important to the ASD student who may have sensory sensitivities. Creating a learning environment that recognizes the emotional well-being of students is of equal importance to the physical environment. Boredom, anxiety, and frustration are common feelings expressed by the ASD student and can be misinterpreted as rudeness by the librarian or other students on the receiving end. More often than not, the ASD student expresses such emotions not out of disrespect but because the student is bored due to high intelligence and the perception of "dumbed down" material, anxious due to challenging relationships with peers, or frustrated by not understanding the social rules of engagement. Lastly, humor can be an important instructional tool, but as noted earlier, humor can be mystifying to the ASD student, especially in a culture that tacitly connects humor with intelligence. In the case of the ASD student, not understanding a joke is simply a matter of receiving and processing information differently.

The past decade has witnessed an evolution of two approaches to teaching and delivery of content that are promising for the ASD student: online education and universal design of learning (UDL). Library instructors may look to online learning modules, especially asynchronous classes and tutorials, as a delivery method well-suited to ASD learners who may not function as well in the spontaneous, face-to-face classroom environment. The social environment of the classroom can be a confusing and exhausting experience for the ASD student who may spend class time processing social cues and environmental stimuli rather than absorbing the content of the class. Chat reference is another avenue of online help that could benefit the ASD student who may not be as adept at face-to-face contact with a librarian.[16]

The universal design of learning approach seeks to design products and environments that are maximally usable for all and eliminate the need for further adaptation or specialized design. While originally focused on architecture and design, universal design of learning has come to include designing inclusive curricula, particularly in primary and secondary education. In 2001, the ALA approved a policy that "libraries should use strategies based on universal design … to meet the needs of all people."[17]

Regardless of the delivery of instruction or the teaching method used, neurotypical students, ASD students, and librarians alike can benefit from each other's unique learning styles and embrace the diversity of the inclusive classroom and reference transaction. Historically, the term disability conjures images of limitations or deficits, particularly those of a physical nature. Current research and a shift in social ethos have helped create a broader and more positive understanding of disabilities—physical and invisible—recognizing the contributions, strengths, and skills that ASDs bring to institutions of higher education.

SOLIDIFYING THE LIBRARY'S ROLE VIA OUTREACH

Libraries can improve services to ASDs and raise awareness among the collegiate population through various outreach initiatives. One way to inform the campus community about the importance of autism acceptance is to plan events during Autism Awareness Month in April. These could include inviting speakers to the library or other campus venues; hosting panel discussions with students, faculty, and staff on the spectrum; showcasing library materials on autism; and screening documentaries. The library could establish itself as one of the "destinations" for autism-related information resources on campus.

In recent years many academic libraries have developed personal librarian programs to serve specific groups of students including freshmen, those living in campus dormitories, honors program participants, and graduate students in particular fields.[18] Universities with curricular and cocurricular programs to support ASDs would be particularly well suited for this since it would serve an easily identifiable, cohesive group (instead of having to find individual ASDs across campus).[19] A personal librarian program for ASDs would help ease the one-time reference or instruction session challenge that librarians face when assisting most patrons. ASDs could be assigned to librarians with subject expertise or personal propensities in their special interests, a commonality which could jumpstart their relationships and be mutually beneficial. Librarians could develop a meaningful rapport with these students over the course of their academic programs, serve as intellectual and social mentors, and, perhaps, in some cases, encourage them to consider librarianship, the professoriate, research, or academia in general as possible careers.

Many libraries set aside time each year for staff training activities, and ASDs would be an appropriate subject on which to focus. Staff development opportunities could include hands-on workshops, discussions with experts (ASDs, faculty, psychologists), and team building activities that involve role-playing. Including ASDs themselves as protagonists in these activities would be highly beneficial so that staff could form a more accurate understanding of life on the spectrum. The campus disability services office and human resources may be helpful partners to consider when organizing these activities. Library outreach to this growing campus constituency is increasingly important because ASDs form a crucial part of the diversity that parent institutions strive to embrace.

CONCLUSION

College and university libraries play a pivotal role in shaping the educational opportunities for their primary user population: students. The policies, services, and collections that libraries create can either inhibit or expand the personal and intellectual development of the individual student, unique user groups, and the collective student body. ASDs constitute

an important and growing minority user group who attend institutions of higher learning. By removing physical and psychological barriers, libraries can be models of service excellence to their campus communities and profession. The ADA and the ALA Code of Ethics provide libraries with a legal foundation and an ethical framework within which to make just and enlightened decisions. The positive outcomes of providing inclusive services to ASDs are myriad and far-reaching, including but not limited to improving retention and academic success, creating programs and facilities that benefit all students, and leading the way in making subtle disabilities visible to the campus community and, in a broader sense, society as a whole.

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