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Making Space for Students on the Autism Spectrum in the Academic Library

John B. Napp (Engineering Librarian)

Associate Professor & Engineering Librarian at the University of Toledo

Jennifer Helen Obertacz

Library Media Technical Assistant, University of Toledo

Abstract

Research has shown that students on the autism spectrum are more likely than neurotypical students to major in STEM fields. Other research, on school children as well as older students, has shown that students on the autism spectrum can benefit from an environment where stimulation is reduced. The author's institution had recently designated specialized rooms for nursing mothers, parents with small children, and veterans. During Fall Semester 2019 the authors applied for grant funding to renovate a small, unused room on the second floor of Carlson Library on the Main Campus of The University of Toledo. Following recommendations in the literature and advice from the campus Student Disability Services Office, the authors selected lighting, soundproofing, furniture, and paint for the room renovations. They also obtained support from the Dean of University Libraries for the project. However, plans changed when the COVID-19 pandemic emerged in the United States in early 2020. The University went virtual from mid-March to Mid-August 2020, and all librarians were working from home. Sources of funding disappeared due to fears of an economic downturn. In the Fall of 2021, we were told there was internal funding available for this renovation. This paper reports on the authors' future plans since funding is on hold.

Introduction

Wei, Yu, Shattuck, McCracken and Blackorby reported on research using data from the National Longitudinal Transition Study-2, 2001–2009 which looked at high school students in special education with autism spectrum disorder (ASD) who went on to postsecondary education. Based on their survey, the authors found that students with ASD were more likely than other disability groups (34.31%) to choose a STEM major or a computer science major (16.22%). The general population of students choosing a STEM major is 22.80% and computer science in 6.6% (Wei, Yu, Shattuck, McCracken and Blackorby 2014).

Since ASD includes those with minimal disability many students with ASD do not identify themselves to instructors or campus disability offices so while precise numbers are not available, a study by White, Ollendick, and Bray reported "between 0.7 percent and 1.9 percent of college students could meet criteria" for ASD (White, Ollendick, and Bray 2011).

While there is a large body of research on how to make elementary school classrooms more welcoming to students on the autism spectrum, there is a small but growing body of research on how academic libraries can better assist and provide spaces for students on the autism spectrum. This article adds to that research.

During the Fall Semester of 2019, the authors began a literature search, contacting the campus Student Disability Services office as well as other local agencies for best practices and advice on serving college students who are on the autism spectrum. Approval to convert an un-used room on the second floor of Carlson Library was granted by the Dean of Libraries.

Literature Review

The literature discussing issues around children with Autism Spectrum Disorder (ASD) are of two basic types. Separate from pedagogical styles are those describing the design of classroom

spaces for students on the autism spectrum. Little of that research deals with library environments. Since some of the recommendations for the elementary classroom setting may be adapted for older students, we have decided to include such research in this review.

Shea and Derry describe how academic libraries can better serve the needs of students with ASD. Among the suggestions given are for librarians and staff to be taught how to interact with these students. Students with ASD often have difficulty in social situations so communicating with a librarian or other staff could be stressful. The authors also suggest providing quiet space free from the distractions that busy academic libraries often have (Shea, Gearald, and Derry 2019).

A 2019 article by Pionke, Knight-Davis and Brantley describes an Eastern Illinois University program that is a collaboration between a student ASD support group and the library. The authors conducted interviews with students from the support group. One finding was that students diagnosed with ASD often are also diagnosed with an anxiety disorder. "Enclosed, private, spaces, such as a study room, offer a simplified environment..." that reduces anxiety (Pionke, J. J., Knight-Davis, and Brantley 2019).

McAllister and Maguire discuss the difficulty in designing classrooms for ASD and ADD students. One problem they cite is a lack of communication between educational staff and designer. Architects and interior designers are not trained in how to design for students with special needs. To assist in this, architecture students from Queen's University Belfast developed an ASD Classroom Design Kit. The Kit allows educators and architects to move room elements around to see how they will work in the space (McAllister, Keith, and Maguire 2012).

Anderson describes how librarians and campus autism support programs can collaborate to assist students with ASD to be successful college students. Semi-structured interviews were conducted with staff at five US colleges and universities with an autism support program which collaborated with the campus library. The article describes what was learned from the interviews. Relevant to the current paper was the idea of the library as a comfortable place for students with ASD. Because of their sensory needs, busy academic libraries can be overwhelming. A distraction free space is recommended. The author uses the term "sensory escape" to describe how such a space could function (Anderson, Amelia 2021).

In another article, Anderson also discusses the problem of adults with ASD being rendered invisible in the literature by focusing on autistic children. The American Psychiatric Association (APA) describes adults with ASD exhibiting deficits in communication skills, a need for routine and sensitivity to change. Anderson writes that due to their logical layout, abundant signage, and an organized collection, students with ASD often seek out their campus library as a quiet, distraction-free place to study. One suggestion for librarians is to provide study carrels or private study rooms to lessen distractions for students with ASD (Anderson, Amelia 2018).

Lawrence provides a summary of the different approaches to dealing with neurodiversity (a blanket term for ASD and other neurological variations) in a library setting. Lawrence points out how little literature there is on autism in libraries and that "… librarians have a special obligation to generate theory, policy, and practice that is consistent with neurodiversity...." The author

argues that endorsing neurodiversity is consistent with librarians' traditional commitment to providing equitable services (Lawrence, Emily 2013).

Tufvesson and Tufvesson describe the methods used in Swedish schools to assist students with concentration difficulties such as ASD. The Swedish Educational Act requires that schools be accessible to all children. A study was done to determine what accommodations would enable children with ASD be more successful in school. Students with ASD preferred classrooms that eliminated or minimized distractions, such as direct sunlight, loose furnishings, windows with a view of the schoolyard, and HVAC noise, as well as other background sounds (Tufvesson, Catrin, and Tufvesson 2009).

Gaines and Curry describe the effect of color in the learning environment on students with ASD. A chart is provided with colors and description of how students react to each. This chart could be useful when choosing paint, flooring, and furnishing colors. They recommend avoiding strong primary colors in favor of warm, neutral ones (Gaines, Kristi, and Curry 2011).

Cho reports on the Adelphi University's Bridges to Adelphi Program that helps students with ASD and other neurological disorders successfully transition from high school to college. Adelphi University library offered an information literacy instruction workshop as well as a webinar version through the program. The author suggests that librarians should become familiar with how students with ASD tend to interact with others so the librarian will be sensitive their needs (Cho, James 2019).

The Plan

The authors approached the Dean of University Libraries with the idea of creating a space that would allow students on the autism spectrum to escape the noise and distractions often present in Carlson Library. This concept is supported by the work of Pionke, et al, Tufvesson, and Anderson. The Carlson Library already has a space dedicated to student veterans and had planned for a space for nursing mothers, so favorable precedent existed. The Dean and the Director of Operations for the Library identified a small, unused room for the project. Furnishings were selected for purchase based on the recommendations in the literature and suggestions from the Student Disability Services Office.

The literature recommended providing a variety of seating options that could move and adjust, so the furniture chosen included a beanbag chair, a small couch, and a worktable with an adjustable chair (Tufvesson, 54). Modifications to the room itself included replacing the fluorescent lighting with LEDs to eliminate distracting humming noise, a dimmer, paint in a calming color for the walls, and soundproofing to eliminate outside noise. The room has a clear glass window next to the door that goes floor to ceiling. The budget includes an opaque panel to cover the lower half of the window for privacy (McAllister 2010). The final addition was an LED calming light box mounted to a wall. The Director of Operations estimated a budget for the renovations of $5,000-$5,500 in the fall of 2020.

One question the authors had was whether access should be controlled or restricted. The veteran's lounge has key card access to restrict use to veterans identified by the campus Military

Service Center. It would defeat the purpose of a private, quiet space if any student could use it, but if they are required to gain access from library staff, they could be reluctant to self-identify as neurodivergent. Students having a crisis, likewise, might opt to leave the library instead of requesting access to the room. In discussion with the Director of Operations, the Dean of Libraries and the Student Disability Services Office it was decided that having any type of restricted access would be impractical. Students on the autism spectrum do not identify themselves to the Student Disability Services Office unless they are requesting accommodations or services. Restricting access to students known to be on the autism spectrum would miss students unknown to the Office who still might want to use the room. The Student Disability Services Office offered to help publicize the room. A statement would be included about the intended users of the room and that it was not just another group study room for general student use.

Another question that arose in discussions with the Dean was the name of the renovated room. Names like “Quiet Room,” or “Calm Room” seemed too generic to identify the space as intended for students on the autism spectrum and give the impression it was open to any student, but at the same time a more descriptive name like “Autism Room” would, of course, be stigmatizing. For now, “Sensory Room” is the most likely choice after discussions with the Student Disability Services Office.

Academic librarians, considering the creation of a space for students on the autism spectrum, should first contact their campus office, which serves students with disabilities, if one exists. This office can be an ally for funding, as well as a partner in promoting the availability of space. Many communities have agencies to help persons with disabilities. These agencies can be a source of recommendations and advice if a disabilities office is not available on campus.

Buzzing or humming fluorescent lighting and noisy HVAC systems can be problematic for persons on the autism spectrum. LED lighting is silent and more cost efficient than the fluorescent tubes often found in academic buildings. Outside noise can be ameliorated through soundproofing materials.

Seating that allows seat height/angle adjustment and is easily moveable are preferred. The literature also recommends having a variety of seating options such as couches, bean bag chairs and more traditional study chairs. Pillows on the floor could be another consideration.

Windows that give a view of people passing by can be distracting, so either a windowless room or one with windows set high are good options. Any artwork displayed should either feature landscapes or abstract features, not people. Brightly colored walls and carpeting should be avoided as well.

Conclusions

Academic libraries are the intellectual heart of their campus where students and faculty come for research and study. They are also social spaces where students meet between classes and socialize with their friends. Librarians have a long history of providing equal access to library physical space and to materials free from bias.

Collections containing materials covering all sides of controversial or taboo subjects are expected from modern academic libraries. Programming aimed at or highlighting marginalized groups is one way libraries show a commitment and openness to diversity and inclusion. Another way to show a commitment to diversity and inclusion is the physical space of the library. But Students with ASD can be especially disturbed by noise and other stimuli that other students would not notice or would be able to ignore. A busy, noisy academic library might seem overwhelming to a student with ASD. Students who feel uncomfortable in the library may avoid studying there. For this reason, academic librarians should consider designating a space designed to meet the needs of this student group.

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