Intro to Library and Information Sciences

Aimee Norris

Topic Paper 1

Summer Session 1

May 29, 2014

Assisting Patrons with Autism in Public Libraries

With the increasing amount of children being diagnosed with autism spectrum disorder, there is pressure by parents and autistic individuals for schools and libraries to provide them with proper assistance and accommodations. Teachers and librarians need to be informed, trained, and up-to-date with current knowledge and research, as well as understanding, willing to help, and flexible with their way of thinking as well as adventurous in trying new techniques, such as incorporating technology and even altering the physical layout of the school room or library to best fit the needs of their ASD students and patrons. There have been major advances in technology geared towards helping youth with ASD, with specifically adapted apps, tablets, video games, e-books and smartphones, and there have been studies done on creating the best physical space to cater to ASD individuals, which can be applied to school and library settings.

To give a brief history, autism spectrum disorder is a neurodevelopmental disorder that affects social, verbal, and physical communication. According to the Centers for Disease Control and Prevention, about 1 in 68 is the current rate of children diagnosed with a form of ASD. As it is a spectrum disorder, the symptoms and behaviors can differ widely from one individual to another. With high functioning autism and those with Asperger's Syndrome, the individual may

show normal to remarkable intelligence but have trouble comprehending certain forms of communication, such as figurative language, physical cues, sarcasm, and lying. In her article "Asperger's Syndrome: How the Public Library Can Address These Special Needs," Holly Halvorson states that children with Asperger's "have average to above-average intelligence and may have advanced vocabularies, but they have difficulty understanding speech in social contexts; furthermore, they have trouble reading nonverbal cues such as gestures and facial expressions, so their social behavior is often inappropriate." They may not know how to respond correctly in conversations and can come off as rude, blunt, cold, selfish, or odd. For those who suffer more severe forms, the individual with ASD may not speak at all and be incapable of caring for themselves.

In the past, a librarian may only encounter a few children and adults with autism every once in a while. Today, you will likely meet a few for every one hundred patrons per day, and possibly many more. The public library is inherently appealing to ASD children, teens, and adults, as it is a quiet place with rules, policies, and access to technology and materials that interest them. For those who are homeschooled, the library provides parents with access to learning materials. It is also a place where ASD individuals can find relief from stressful social interaction. When talking about sensitizing staff and community about ASD, Halvorson emphasizes the importance of the library as a way for ASD patrons to socialize under their own terms and, "If a child experiences acceptance, happiness, and success there, it can be a haven for the rest of his life." While parents may feel socially ostracized by the behaviors of their ASD children and ASD teens and adults can feel self-conscious about being in a public place, libraries

that provide accommodations for them and train librarians to be compassionate and understanding can allow for a more welcoming space to feel included in the community.

The library can also provide a place of research for the parents, siblings, and friends of ASD individuals as well. With the slush of data on the internet and media, it is hard for parents to parse true scientific data from pseudoscience hearsay. As Halvorson states, "Parents of children with AS will likely hear all sorts of theories about the disorder and cures for it, especially considering the amount of 'junk science' that can be found on the Internet and elsewhere." For instance, the anti-vaccination and gluten-intolerance camps are widely popularized in media despite their claims being debunked by a great deal of scientific research. In actuality, scientific research points to in-utero development and thyroid hormone deficiencies (CNN.com). While some of the snake-oil theories around autism are harmless, many can be potentially dangerous--specifically the anti-vaccination groups. It is important that the parents and the autistic individuals are given guidance, support, and access to all available information.

One of the best and easiest approaches to accommodating the ASD individuals in a public library setting is through staff and librarian training. In Holly Halvorson's article, "Asperger's Syndrome: How the Public Library Can Address These Special Needs," she mentions how librarians who are not familiar with Asperger's Syndrome or autism can become annoyed or alarmed by the ASD individual's behaviors. They may stand too close, avoid eye-contact, make strange or inappropriate gestures, pace, or mumble to themselves. Halvorson gives suggestions for librarians and staff to be on the lookout for telltale behavior, such as "lack of eye contact, stiff and one-sided speaking style, and motor clumsiness." Her rules of thumb for interacting with AS children include: speaking literally, addressing misconduct directly by referring to the

rules of the library (AS and ASD individuals are generally respectful of rules), not insisting on eye contact, watching out for signs of distress, and being aware of your own behaviors--touching, for instance, even well-meaning, can be threatening to a child with ASD. Children and teens with ASD can also be prone to bullying, which Halvorson recommends that the librarians keep an eye out for and address swiftly. As for creating programming centralized on ASD individuals, she suggests that, "Social groups that revolve around the child's special interest (for example, trains, computers, chess) can help motivate them and provide a safe and supported environment for learning to interact with their peers. They may benefit from videos or reader's theater activities." Having clear beginnings and ends, simple pictures--preferably real photos over illustrations--and signals for each change in the program are also important methods to consider when creating and implementing programs for ASD children.

Routine and repetition are also central themes in Lynn Akin and Donna MacKinney's article "Autism, Literacy, and Libraries: the 3 Rs = Routine, Repetition, and Redundancy," where they also discuss ways in which libraries can best accommodate ASD children. They bring up the importance of the public library and programs like storytelling in the education and literacy of ASD children, specifically through literary techniques such as related readings, directive scaffolding, social stories, technology, peer tutoring, and music therapy. They maintain that "skills learned in the school library can be transferred into the local public library and then extended into other community situations. Skills learned in the public library transfer back to school, and a cycle of success is arranged." Through the use of books, videos, circle time, movement and song, and the employment of the "three R's: routine, repetition, and redundancy"

a public library can increase the comfort level of the autistic child, orient the child to the program, and encourage cooperation and independence.

In Lesley S.J. Farmer and Maureen Sykes' article "Library Services for Students with Autism," they also emphasize routine and consistency. They also suggest that librarians consider adding learning resources to the library's collection that build on sensory experiences: "books with repetitive and predictable elements, rhyme, familiar sequences, question/answer format, or have a chain or circular story pattern." Also books that are more literal than figurative and non-fiction can be very appealing to ASD children. Mass-media books and materials are also important to many ASD children who often develop obsessions with various subjects or characters such as *Thomas the Train Engine* or *Pokemon*. As, again, ASD is a spectrum disorder, each child is different and what one child likes and how one child acts in certain circumstances can vary drastically from one to another. As Sykes and Farmer states, "Probably the most effective way to engage students with ASD is to get to know each child on a personal basis." Whatever works best should be applied in order to improve the child's cognitive and social skills.

Including parents in the programs and involving them directly in their children's development is also important. As mentioned before, many parents of ASD children can feel uncomfortable with taking their children out into public and bringing them to normal children's programs such as storytime. In Anne Leon's "Beyond Barrier: Creating Storytimes for Families of Children with ASD," she faces this problem head on. In 2010, the Alvin Sherman Library, Research, and Information Technology Center teamed up with Interdisciplinary Council for the Study of Autism and Sherman Library's Public Library Services to create a storytime program

specifically for parents of children with ASD. Leon states, "Our goal was to create a program that allowed children and parents to experience a traditional library storytime—modified for their needs—in a safe, nonjudgmental space." Through the program, the library and team found that there was a need for information, referral, and supportive library materials for families. By working directly with the institutes that specialized in and held a great knowledge about ASD and education, they gained valuable practical advice in choosing and adapting materials for the program. High flexibility, focusing on early education, and keeping the class sizes small were essential to the success of the program. They also put a strong focus on parents as partners, involving them directly in the project and using their experience and feedback as a way to evaluate the program's effectiveness. Overall, while the program is still being tested, it shows great progress in approaching its goals: bringing in more families of ASD children into the library and providing them with specialized support without judgement, giving access to materials, and encouraging them to explore the traditional aspects of the library.

     One big resource that was created for librarians to help them understand and accommodate children and individuals with ASD is a website created by the Scotch Plains Public Library and Fanwood Memorial Library in New Jersey called "Libraries and Autism: We're Connected." They have a customer-service training video for library staff that gives an overview of techniques on how to be more compassionate and inclusive when interacting with ASD individuals. The website helpfully provides a great deal of resources: print outs, signs, powerpoint slides, downloadable sign language font, links to databases, news, and other websites that give tips and advice. They also have a listing of other libraries that have implemented ASD-focused programs to be used as case studies and success stories. Overall, it is a wonderful

site for basic instruction and education that all public librarians and staff can use to introduce program ideas and build understanding in the community.

A few of the articles discussed have also mentioned the importance of physical space when accommodating ASD patrons. As loud noises, fluorescent lights, bright colors, over-abundance of signs, fliers, and other paraphernalia on the walls, and large windows can be distracting for ASD individuals, it is important for the library to provide a space away from these uncomfortable sensory irritations so the ASD patrons can best utilize the library's services. Farmer and Sykes recommended that "The library door should be closed to eliminate outside noises. Natural lighting should be used since fluorescent lighting upsets some autistic children. Wall maps and learning stations can provide structured educational stimuli." These are simple changes that can be made to a part of the library, such as a playroom, a community room, or a separate section of the library. At Harold Washington Library, there are little coves on many floors which have low lighting, bare decorations, and can allow for quiet which would be appealing for ASD patrons. In Andrea Bress's article "Making Your School Library More Functional to Individuals with Autism," her central requirements for a library is to be comfortable and low stress. Like what Sykes and Farmer pointed out, Bress states "It is easy to overlook certain things, like posters on the wall, the pattern on the floor, and even the amount of light in a room that may result in the student fixating or focusing all attention on the pattern rather than engaging with the learning materials." Turning furniture and desks away from distractions can help. Also, ASD children like routine, so keeping the furniture and books in the same place and having clearly designated areas is key. Basically: keep it simple, keep it the same, and keep it calm.

It is important, however to remember that a child with ASD should be challenged and encouraged to interact with others as well in order to develop their social skills. A study was done in 2012 by Keith McAllister and Barry Maguire titled, "Design considerations for the autism spectrum disorder-friendly Key Stage 1 classroom," which worked with teachers using modeling and 3D software and the testimonies of teachers with autistic pupils to develop an effective classroom layout for ASD children. While the study was focused on the classroom, I feel that some of the conclusions they found can also be used to create a space in a public or school library to best enhance learning with ASD children. While Maguire and McAllister found that many of the suggestions for the classroom space were similar to what I found in the previous articles: lack of fluorescent light and visual distractions, quiet spaces, calm and simple colors and furniture, there was also an emphasis on challenging ASD pupils and allowing them access to the outside world. As Maguire and McAllister write, "providing a classroom environment that always completely shields the pupil with autistic spectrum disorder from outside influences is not necessarily the best solution for their long-term development." The ASD child must feel comfortable and safe enough to learn, but also feel encouraged to interact with the outside world and develop necessary social skills.

Lastly, one accommodation universally praised as being beneficial for ASD children, teens, and adults, is the use of technology. It has been well documented that individuals with ASD react positively to the use of computers and tablets, and many therapists, school teachers, and parents use these devices for working with ASD individuals. Apps for phones, interactive e-books, communication through typing, videos, audio, and social media, as well as video games can provide extra learning experiences. Halvorson states, "Librarians sometimes lament the

proliferation of computer games in our libraries. However, thinking about the games from this viewpoint can help us see the value of them, especially for children with AS, for recreation and even stress relief." There are some developers, such as BrainParade, FizzBrain Apps, Project Injini, and Speech with Milo who cater directly to ASD children by providing learning applications, video games, and interactive communication programs. In her article "Apps and Autism," Barbara Klipper reviews some of the popular programs and websites where ASD-specific apps can be downloaded, such as "TouchAutism" (touchautism.com/TouchAutismApps.aspx) and "Welcome to Their World Apps" (welcometotheirworldapps.blogspot.com). Klipper argues that there can be several ways apps can be used in a public library setting: through programs introducing the tablets and applications, brochures listing details about the applications, and interactive storytimes. For storytimes and art activities the use of tablets and applications can be especially helpful as "children with ASD have tactile defensiveness and are not comfortable with finger paints, glue, or other craft supplies. Providing these children with a tablet device loaded with a doodle or drawing app allows them to participate in an art activity in an adaptive fashion." Also, circulating tablets and devices within the library can have preloaded apps for autism so that the families can have access to them and for those who already have tablets, they can review programs before they purchase them.

Two particular articles analyze the research behind technology use and learning opportunities for children with ASD. "A Smart-Phone Application and a Companion Website for the Improvement of the Communication Skills of Children with Autism: Clinical Rationale, Technical Development and Preliminary Results" by Gianluca De Leo, Carol H. Gonzales,

Padmaja Battagiri, and Gondy Leroy explains their study on the use of a smartphone application called "PixTalk" in the classroom setting. Traditionally, teachers of students with ASD have used laminated cards with pictures to interact and encourage communication with their students. While proven to be helpful, this method can be cumbersome and limiting, as the collection of laminated cards can become overwhelming for the child and teacher and searching for the right card can be frustrating, especially as many cards can be lost or damaged. With the smartphone application--which is housed in a waterproof, durable phone for the sake of the study--the teachers and ASD students can communicate through the same images as before with considerable speed and ease. For those students who are tactile sensitive and may hate the tradition use of lamination and velcro, the touch screen provides an appealing alternative.

Another study, Amy Price's "Making a Difference with Smart Tablets: Are iPads Really Beneficial for Students with Autism?" evaluates the use of tablets in educating ASD children in the library setting. Overall, Price found the results of the study to be positive. Students enjoyed the touch screen and, in the small sampling, she found that every ASD child showed an improvement in reading comprehension and information acquisition after using the tablets and reading interactive e-books. Some issues she found, however, include the software issues and lack of flexibility in the iPad application synchronization, organization of files, and navigating the iTunes store. Price also suggests that the developers provide a more comprehensive description of each application in the app stores so that parents, teachers, and librarians can have more information about the nature of the app so they can make the best recommendations for the parent or student. Overall, the study provides good evidence that the use of tablets and e-books can be beneficial learning devices for children with ASD.

However, with great technology comes great responsibility. In the article "Digital Citizenship for Youth with Autism Spectrum Disorders" Lesley Farmer brings attention to a serious matter: online bullying, social media etiquette, and the risk of stolen privacy and identity. For children with Asperger's and high functioning autism, the internet can be a wonderful place for learning, interacting with others, and connecting to various communities. Communicating online can be, for ASD and AS individuals, much more preferable than face-to-face interaction, which requires concentration on interpreting and providing facial cues, tonal nuances, and posture as well as literal speaking. Farmer mentions that, "While some youth with ASD have difficulty in discerning other people's perspective, they are often willing to share their own knowledge, which technology facilitates. Technology's social media features also help youth with ASD improve their communication and social skills." In written communication, all the complications of verbal communication are no longer necessary, which relieves a lot of stress and allows for more freedom to think about what they want to say and say it as eloquently as they wish without anxiety. That isn't to say, though, that ASD and AS individuals will be free from bullying online and less prone to unsafe practices. As Farmer points out: "In their research on cyberbullying among youth with ASD, Kowalski and Fedina (2011) found that this population is more likely to be bullied online than other youth, sometimes at a rate of 75 percent of a study population." Many AS and ASD children and teens have difficulty understanding figurative language and sarcasm, and may react poorly to criticism or comments, and they are likely to take information at face value, which can potentially result in identity theft and further cyberbullying. For ways to deal with this, Farmer suggests that teacher librarians provide the

student with concrete, literal examples of safe and unsafe practices, show videos, and create social stories and "scripts" they can follow as examples for learning appropriate behaviors.

From what I have learned reviewing the current literature on ASD accommodations in the public library setting, it is refreshing to know that many libraries have made great strides to help ASD individuals and their families and create an inclusive environment where they can come, without judgement, to learn and access information and technology. What I think libraries also need to focus on, now, is the growing population of *older* ASD individuals. There needs to be more programs and technological accommodations for young adults, college-age, and adults with ASD, not just children. Many of the children who were diagnosed with autism when I was younger are college age and older now. When I was a transcriptionist at Kansas State University's Disability Support Services back in 2007, I asked the director whether or not they provided accommodations for university students with autism. She told me that there were, as far as she knew, no autistic students at the school and she didn't think that autistic children would be able to make into college. While that may have been the case in 2007, that is definitely not true today. In fact, just recently I graduated from the Master of Fine Arts program at the School of the Art Institute of Chicago and several of my classmates had Asperger's Syndrome or high functioning autism. As the autism spectrum disorder becomes more common, it is important for libraries to keep up with knowledge about the disorder, train their librarians and staff in providing an inclusive environment and understanding for ASD individuals, and be up-to-date and willing to incorporate current accommodations, whether it is providing a literal space in the library that is ASD friendly or giving patrons and families access and training on the use of innovative technology.

Bibliography

2008. "Focusing on Autism." *School Library Journal* 54, no. 12: 13. *Academic Search Complete*, EBSCO*host* (accessed May 29, 2014).

Akin, Lynn, and Donna MacKinney. 2004. "Autism, Literacy, and Libraries." *Children & Libraries: The Journal Of The Association For Library Service To Children* 2, no. 2: 35-43. *Academic Search Complete*, EBSCO*host* (accessed May 29, 2014).

"Autism Spectrum Disorder (ASD): Data and Statistics" *Centers for Disease Control and Prevention*. Last modified: March 24, 2014
http://www.cdc.gov/ncbddd/autism/data.html

Bress, Andrea. 2013. "MAKING YOUR SCHOOL LIBRARY MORE FUNCTIONAL TO INDIVIDUALS WITH AUTISM." *Library Media Connection* 32, no. 1: 46-47. *Academic Search Complete*, EBSCO*host* (accessed May 29, 2014).

Farmer, Lesley. 2012. "Digital Citizenship for Youth with Autism Spectrum Disorders." *CSLA Journal* 35, no. 2: 12-13. *Academic Search Complete*, EBSCO*host* (accessed May 29, 2014).

Farmer, L. J., & Sykes, M. (2008). Library Services for Students with Autism. *CSLA Journal*, *31*(2), 25-27.

Happe, Francesca. "Autism is Growing Up." *CNN.com*. Last modified: May 20, 2014.
http://www.cnn.com/2014/05/20/health/autism-adults/

Halvorson, Holly. 2006. "Asperger's Syndrome: How the Public Library Can Address These Special Needs." *Children & Libraries: The Journal Of The Association For Library Service To Children* 4, no. 3: 19-27. *Academic Search Complete*, EBSCO*host* (accessed May 29, 2014).

Klipper, Barbara. 2013. "Apps and Autism." *American Libraries* 44, no. 6: 36-39. *Academic Search Complete*, EBSCO*host* (accessed May 29, 2014).

Leo, Gianluca, Carol Gonzales, Padmaja Battagiri, and Gondy Leroy. 2011. "A Smart-Phone Application and a Companion Website for the Improvement of the Communication Skills of Children with Autism: Clinical Rationale, Technical Development and Preliminary Results." *Journal Of Medical Systems* 35, no. 4: 703-711. *Academic Search Complete*, EBSCO*host* (accessed May 29, 2014).

Leon, Anne. 2011. "Beyond Barriers." *Children & Libraries: The Journal Of The Association For Library Service To Children* 9, no. 3: 12-14. *Academic Search Complete*, EBSCO*host* (accessed May 29, 2014).

MCALLISTER, KEITH, and BARRY MAGUIRE. 2012. "Design considerations for the autism spectrum disorder-friendly Key Stage 1 classroom." *Support For Learning* 27, no. 3: 103-112. *Academic Search Complete*, EBSCO*host* (accessed May 29, 2014).

PRICE, AMY. 2011. "Making a Difference with Smart Tablets." *Teacher Librarian* 39, no. 1: 31-34. *Academic Search Complete*, EBSCO*host* (accessed May 29, 2014).

Szabo, Liz. "Brain Changes of Autism May Begin in the Womb" *USATODAY.com*. Last modified: August 13, 2013.
http://www.usatoday.com/story/news/nation/2013/08/12/autism-labor-induction/2641391/