Autism-Ready Libraries: Early literacy services for autistic children and their families

National Leadership Grants for Libraries—Research in Service to Practice—Lifelong Learning

A University of Washington Information School research team is requesting \$400,664 in support of a two-year research project to improve our understanding of and our ability to include autistic children and their families. In partnership with the Seattle Children's Autism Center (SCAC), the Association for Library Services to Children (ALSC), Seattle Public Library (SPL), and Pierce County Libraries (PCL), we aim to improve libraries' capacity to include autistic children and their families by developing the Autism-Ready Libraries Toolkit (ARLT), which will include early literacy programming and training materials to empower librarians to effectively serve autistic children and their families. Our project aligns with the IMLS strategic objective to focus on "continuous learning for families and individuals of diverse cultural and socio-economic backgrounds and needs."

Statement of Need: In the United States (US) one in fifty-nine children is diagnosed with autism. Autism is a lifelong neurological disorder that is characterized by deficits in language and social behavior, often paired with restrictive and repetitive behaviors as well as heightened attention to specific interests. Autistic children struggle with emergent literacy skills, lagging behind typically-developing peers, placing them among some of the most in need of early literacy library services. In the US, 82.5% of families with autistic children incur \$1.4 to \$2.4 million in additional costs to raise their child. Low-income families in particular struggle to access resources for their child's learning and programming that facilitates their development as well as their social inclusion.

Libraries' early learning services promote early literacy for typically-developing children, providing needed services to low-income families¹. Despite being uniquely suited to provide such services to autistic children, libraries have been slow to do so². Reactions of autistic children to public spaces can include heightened anxiety, social stress, sensory stress, and difficulty communicating. These challenges are not always met with understanding from librarians, creating feelings of exclusion, which limits families' access to much needed library services. Libraries are not equipped to address the needs of the autism community, and there is very little research to inform training for librarians. In two recent preliminary studies we conducted, librarians reported that they were not sufficiently trained to serve autistic children and their families.

There are a few current efforts to provide autism-specific services in libraries, some of which are funded by IMLS. These projects include increasing information access for the autism community (e.g. Targeting Autism), assistive technology efforts to support the autism community (e.g. Spectra kits; Targeting Autism), and autism awareness training for librarians interacting with the autism community (e.g. Targeting Autism). Our project is distinct because we focus on autistic children and their families and aim to 1) develop and assess early literacy programming for autistic children; 2) develop and assess tools to engage parents in their children's early literacy activities; 3) expand upon previous work to further develop and assess training for librarians interacting with autistic children and families. We use best practices we identify in our investigation and existing autism literature to develop our early literacy programming and toolkit. Our approach draws on data from families and librarians as well as evidence-based autism interventions and early literacy programs for marginalized populations. Our efforts will improve our understanding of the needs of autistic children and their families and provide the foundation for an Autism-Ready Libraries Toolkit. We will investigate the following questions:

- 1. What barriers do families with autistic children experience that limit their inclusion in public libraries?
- 2. What early literacy programming are most suitable for autistic children?
- 3. What methods and tools are effective to engage parents in early literacy activities?
- 4. What autism-specific accommodations, professional practices, and programming are currently utilized by libraries to serve the autism community?
- 5. What autism-specific professional development tools and resources are needed to enable libraries to include autistic children and their families in early literacy programming and library services and resources?

The proposed research project aligns with the IMLS strategic plan--most importantly, the focus on continuous learning for families in need and building the capacity of libraries. As a lifelong learning project, we aim to:

- Identify barriers that impact the ability of families with autistic children to access library services and resources in order to support the lifelong learning of autistic children and the needs of their families. Method: We will use an interpretive approach and employ qualitative methods such as focus groups and interviews with family members of autistic children to understand their experiences with public libraries. We will identify the barriers that keep them from—and best practices that enable them to—access library services, allowing us to develop a holistic understanding of the needs of these families.
- 2. Identify the needs of and best practices for libraries serving autistic children and their families to develop effective library resources, programming, and training.

Method: We will use Participatory Design (PD) sessions with children's librarians to better understand the challenges they face working with autistic children and their families, and identify best practices they currently

¹ Albright, M., Delecki, K., & Hinkle, S. (2009). The Evolution of Early Literacy. *Children & Libraries, 7*(1), 13-18.

² Schriar, S., Foester, P., & Pelich, M. (2016). Illinois State Library. Libraries partnering to serve the autism community: national forums offer direction.

use to serve this population.

3. Build the capacity of public libraries to meet the early literacy needs of autistic children and their families. Method: Informed by the outcomes of objectives 1 and 2 and autism-specific literature, we will develop an Autism-Ready Libraries Toolkit (ARLT) that includes: 1) autism awareness multimedia training (online videos and animations) to improve understanding of autism and the needs of the autism community; 2) in-person workshop training (at ALA for example) on best practices for interacting with, and providing programming for autistic children and their families; 3) templates for autism-specific early literacy programs for autistic children to improve lifelong learning that librarians can use; 4) parents guide to engage and support early literacy activities for their autistic children; and 5) checklists and templates for promotion and outreach initiatives to reach the autism community.

Our team includes an interdisciplinary and diverse group of faculty and a doctoral student with expertise to study and develop early literacy programs for an organizational context inclusive of the autism community. Dr. Hala Annabi is an expert in investigating and developing autism-specific training for organizations. Dr. Michelle Martin specializes in early literacy programing for underserved populations. Dr. Jill Locke specializes in evidence-based interventions for the autism community and autistic children. Ms. Emily Romeijn-Stout is a doctoral student and children's librarian experienced in participatory design methods.

Proposed Work Plan: Our study will be carried out in four phases. In Phase 1, we will identify the barriers families with autism face and best practices they experience in libraries. To this end, we will conduct 25 interviews with families who have autistic children. We will use a convenience sample recruited through SCAC. We will include both families who are library patrons and those who are not to understand both perspectives. In Phase 2, we will conduct 4 focus groups with librarians from SPL and PCL and 2 focus groups at ALA with librarians from across the US to identify the needs and best practices of libraries serving autistic children. Phases 1 and 2 will inform Phase 3, when we design and develop ARLT. To design the toolkit we will conduct 4 PD sessions with librarians (2 in WA and 2 in ALA with librarians representing US regions) and 2 PD sessions with families who have autistic children. We will use the output of these design sessions, in consultation with existing literature on early literacy and inclusion, to design and develop the ARLT. To enhance ARLT generalizability, we will conduct 2 workshops with a representative sample of librarians at ALA from around the US to elicit feedback on toolkit components, methods, and medium. Our project will culminate in **Phase 4**, when we deploy the toolkit and assess its effectiveness in addressing the needs of families and librarians. Training will be deployed locally in our partner libraries and nationally through workshops at ALA. Training efficacy will be assessed through feedback from librarians as well as through the use of a simple pre- and post-training autism knowledge and attitudes assessment questionnaire. Early literacy programs will be deployed in partner libraries and assessed by families through feedback questionnaires. Assessments will inform revisions to the toolkit before public deployment through our website and ALA workshops.

Autism-Ready Libraries will have the following broad outcomes and national impacts:

- 1. Our study will expand both library and autism literature, addressing the role of libraries in providing resources and promoting early literacy for underserved communities such as the autism community.
- 2. Build the capacity of public libraries to welcome and include autistic children and their families by providing autism awareness training specific to the public library context.
- 3. Provide equitable access to early literacy programs that support lifelong learning for autistic children similar to VIEWS2 project storytimes³ and Dr. Martin's Camp Read-a-Rama⁴.
- 4. Develop a publicly available toolkit for libraries to improve the lifelong learning of autistic children.

Research results and outcomes will be **disseminated** through library and information science conferences (*e.g., ALA; ASIST*) and publications (*e.g., JASIST; Library Quarterly*). The ARLT will be deployed in partner libraries and will be publically accessible via the web to libraries nationwide via the University of Washington website. We will also conduct in-person training and workshops at ALA for national impact. We will create public awareness of ARLT to the general public through UW local and national communication and media efforts.

Plan for Diversity: Autistic children and their families are a marginalized population in need of early literacy programming to improve their lifelong learning and inclusion in the library community. SPL and PCL represent urban as well as a rural library systems that serve diverse populations across a wide spectrum of socio-economic status, the resources we develop will be replicable and generalizable nationwide.

Budget Summary: The estimated project costs: \$400,664 and includes: direct costs \$275570, F&A \$125,094. Costs include salaries & benefits for PI's and doctoral student (\$189,293), participant compensation (\$10,000), contractual services (toolkit production & conference fees) (\$19,000), Conference travel (\$9,600), Supplies (\$1,500), Doctoral Student tuition (\$46,177).

³ Campana, K., Mills, J., Ghoting, S., & Nelson, J. (2016). Supercharge Your Storytimes. Children & Libraries, 14(1), 36-37.

⁴ Copeland, Clayton A., & Martin, Michelle H. (2016). Camp Read-a-Rama[®] and Fully-Engaged Literacy Learning: Implications for LIS Education. Journal of Education for Library and Information Science, 57(2), 112-130.