Storytimes for School Readiness

Project: Very little empirical research exists to support the development and delivery of high quality storytimes making it difficult to use evidence-based practices in preparing, presenting, and justifying the value of this cornerstone of public library programming for children. The primary goals of this research, for which we request $395,000, are to identify links between strategies employed, resources used, language interactions that occur, and the nature of the language environment within public library storytimes to 1) determine the extent to which they currently support school readiness and expectations of caregivers and 2) pinpoint promising practices for storytime program planning and delivery to enable public libraries to better support the developmental needs of children and their caregivers. The project is led by a team of researchers at the University of Kentucky (UK) who will partner with state library agencies in several states in which more than 50% of preschool children are at risk of beginning kindergarten underprepared.

According to a social–interactionist theory of language acquisition (Bruner; Vygtosky), it is through meaningful interaction with adults that children learn language and make sense of the world. Young children who engage in rich language-based, active learning experiences build cognitive, social, behavioral, and emotional skills foundational for both school success and life-long productivity and well-being (Davies et al; Heckman). Yet, all children do not begin kindergarten prepared to succeed (Child Trends). Public library storytimes are positioned to provide high quality learning opportunities for young children, but the extent to which they are doing so is not known. Just as multiple variables such as materials used, arrangement of the learning environment, and teacher to student ratios affect the quality of the learning outcomes in the preschool context (Morrow; Neuman et al; Piasta et al; Price et al; Zucker et al), so too do these variables likely affect the quality of the storytime learning environment, and in turn, the learning, interactions, behaviors, and attitudes of the children.

This project proposes to examine and inform current practice in the development and delivery of public library storytime programming for preschool children. Specifically, we will examine the links between strategies employed, resources used, language interactions that occur, and the complexity of the language environment to determine the extent to which public library storytimes support school readiness and the storytime expectations of caregivers. The overarching research question and sub-questions guiding this study are: **How do public library storytimes support the development of school readiness skills of preschool children?**

- To what extent do the following storytime factors contribute to school readiness for preschool children?
    - techniques, strategies, and materials, employed;
    - group size, room setting, and participant groups involved;
    - the quality and nature of language interactions;
    - the complexity and nature of the language environment .
- What do parents and caregivers perceive as the value of storytime?
- What are librarians' goals when developing storytimes for preschool children?

Proposed work plan: *Partners and advisory board:* We will regularly conduct virtual meetings with a strategic advisory board that will consist of members from each state library partner agency, and three researchers: Renee Casbergue (LSU) early literacy and child development researcher; Lynne McKechnie (U Western Ontario) storytime researcher and methodologist; and Kun Lu (U Oklahoma) natural language processing and text mining researcher with expertise in advanced statistics.

Participants: Working with state library partners, we will solicit participation from public libraries. From those respondents, we will draw a stratified random sample of 40 libraries based on population of the legal service area and rural/urban designation. From each of those 40 libraries, we will randomly select one storytime provider to participate in the study, and the child and caregiver participants from two randomly selected preschool storytimes delivered by that provider will be asked to participate also. Thus, the study will include child and caregiver participants from 80 storytimes.

Data collection: Year 1—We will use the following procedure to collect data for each storytime. A researcher will pre-arrange and record two randomly selected preschool storytime programs delivered by the selected librarian at each selected library site and collect survey data from each of the parents/caregivers who agree to participate. The researcher will use two cameras to record each storytime: one camera will record attendees who choose to participate, and one camera will record the librarian. In addition, separate semi-structured interviews will be conducted with each librarian. All surveys, the 40 librarian interviews, and two recordings from each of 80 storytimes will be digitally prepared and uploaded to a secure site. All data analysis will be conducted by the core research team at the UK.

Data analysis: Year 2—Full transcription of all videos will commence as the videos are uploaded to the secure site. From those transcripts, we will measure the language complexity of each storytime using textual analysis techniques. From the storytime recordings, we will score the quality of the interactions between the librarian and children using the CLASS Observation Tool (Pianta et al), an instrument developed to measure interactions in formal and informal contexts. Additionally, we will use systematic observational techniques to determine instructional practices and participant behaviors. Finally, three hierarchical levels of storytime factors will be used to comprehensively examine the impacts of program, librarian, and library factors on the quality of interactions and the language environment.

Developing learning modules: Year 3—Based on the findings, asynchronous digital learning modules will be produced to inform home care providers of the benefits of public library storytimes. Additional digital learning modules will be produced to train and support public librarians on promising practices for storytime program planning and delivery to support the developmental needs of children and their caregivers.

Relevance to Libraries as Community Anchors: 1) This research will provide a multi-faceted understanding of how existing storytime practices support young children and their families. 2) Drawing conclusions about effective practices, this project will advance the long-term potential of the LIS field to educate librarians to better serve young children and caregivers. 3) Development of training modules shared broadly, will improve the value the community places on storytime and 4) Librarians' use of training modules will positively impact the quality of storytime programs relevant to communities nationwide.

Performance Goals and Outcomes: This project will produce the following outcomes: (a) guidelines for effective storytimes for school readiness; (b) digital learning modules to inform caregivers and train librarians; (c) guidelines for material selection based on language sophistication; (d) needs assessment of parents/caregivers; (e) identification of effective interactions in the storytime context. The guidelines and digital learning modules will be shared broadly and lead to enhancement of school readiness for young children across the nation.

Potential Impact: Results will be disseminated throughout the grant cycle with the goal of impacting practice. Our final report will provide profiles of successful programs and practical guidelines to support library systems, LIS programs, professional associations, and state agencies in their training of librarians.

Project Team Participants: Dr. Maria Cahill (PI), Assistant Professor and Soohyung Joo (co-I), Assistant Professor, both of the School of Information Science, UK; Mary Howard (co-I), Research and Development Associate, Human Development Institute, UK. Strategic advisory board members: Renee Casbergue, Lynne McKechnie, Kun Lu, and state library agency representatives.

Budget: For the proposed three-year project, our estimated budget is $395,000, divided as follows: $226K for researcher effort (including $85K for two doctoral student research assistants); $24,500 for travel for training, data collection, and research dissemination; $10K for recording equipment and observation training; $8,000 to support library and librarian participation; $1,800 for the advisory board; and $124K in indirect costs.

References: linked to this document