

Examining language development through play: How young children verbally interact while engaging with mobile exhibits in Museum Without Walls

### **Project Background and Description**

In the early years, children's verbal interactions with the people around them helps shape their language competency (Conti-Ramsden et al., 2020). Young children who play and learn in high quality environments display a significantly higher ability to express themselves through use of language and supporting vocabulary (Henry & Rickman, 2007), which has shown to advance language skills at this formative stage of growth and development (Justice et al., 2011). As children participate in the community and formal education settings, such as childcare and Pre-Kindergarten, they are exposed to more advanced language skills, more complex sentence structures, and additional vocabulary and experiences of their classmates and teachers (Justice et al., 2011). Informal learning spaces, such as zoos, libraries, and museums have always been important for children's language development, as children tend to gravitate towards their interests and are in turn motivated to explore the language surrounding them (Paris, 2015). Children in informal settings self-select activities to participate in and how they engage with materials. This self-motivation allows children to naturally develop rich language skills that may not otherwise be accessible in formal settings like schools, childcare centers, or home.

The importance of accessing the full potential of informal learning spaces was highlighted by the COVID-19 pandemic. Since the onset of the pandemic and with the subsequent lockdown, young children's interactions were, for the most part, restricted to their family unit. This transition into fewer public interactions was headed by the closure of childcare centers across the United States (Hochlaf et al., 2020). While being restricted to their homes, children were naturally given more opportunities to listen to and participate in verbal interactions with the members of their household. With this influx of communication with family members, as well as the closure of childcare centers and other hubs for children's play, many children lost out on chances to develop rich language skills through play and verbal interactions with other children.

The Omaha Children's Museum (OCM) was one of the many community institutions that temporarily closed during the pandemic. To continue outreach despite the closure, OCM pushed out virtual content (educational videos) for children. Despite their best intentions, many families in the surrounding Omaha area remained unable to access the full benefits of OCM. This is why the project *Museum Without Walls* (MWoW) was created. MWoW, an ongoing collaboration between OCM and UNO researchers Dr. Anne Karabon and Dr. Amelia Lanier, is a collection of fun and educational mobile exhibits that will be transported and assembled in different communities in the Omaha area. MWoW aims to bring elements of OCM to children and families that may not otherwise have access to the rich learning environment OCM provides. Through MWoW, young children raised during the pandemic will have the chance to interact with other children and families in their community. This will result in the unique opportunity to examine the impact of children's verbal interactions with one another post-pandemic.

The goal of this project is to examine how linguistic development is fostered with young children while engaging in a traveling, community-based exhibit. I will explore language use and interactions between children, adults, OCM staff, and other children. Three research questions will be examined:

- (1) In what ways do families use verbal interactions in play?
- (2) What types of interactions are young children having with other children while engaging with and in Museum Without Walls?
- (3) How do young children and adults leverage verbal interactions while playing within the mobile exhibit to extend play?

**Methodology:**

**Participants:** Because of the connection to Dr. Karabon’s work for MWoW, I will not need to recruit participants. Parents, families, and childcare providers of children aged 2-5 years and members of the OCM staff will participate in interviews and focus groups.

**Procedures:** Methods for collecting data for this project include questions posed in semi-structured interviews, focus group discussions, and observations at community events. I will add questions to the existing interview and focus group specific to my research questions: verbal interactions between child to child, child to adult. I will attend the pre- and post-interviews with families/participants of MWoW and ask one or two questions to facilitate my research. Observational field notes will be collected at the community outreach events.

**Analysis:** I will transcribe data from interviews and focus groups verbatim. The transcriptions will be uploaded to NVIVO, a qualitative software (Bazeley & Jackson, 2013), to organize and analyze data. Dr. Karabon will train me on NVIVO and guide me through how to create codes related to interaction and play. For example, quality of feedback from adults and other children, posing questions, labeling (e.g., items, movement, concepts, and play), and exclamatory expressions (e.g., excitement, frustration). I will discuss emerging themes with Dr. Karabon as I analyze the data.

**Project Timeline:**

Semester	Month(s)	Activities
Spring 2022	April-May	<ul style="list-style-type: none"><li>● Get IRB approval (Dr. Karabon has IRB approval #0894-21-EX) by submitting an addendum</li><li>● Complete human subjects research training</li><li>● Begin conducting interviews and focus groups</li></ul>
Summer 2022	May-August	<ul style="list-style-type: none"><li>● Transcribe interview and focus group data</li><li>● Observations of community events with MWoW</li><li>● Initial analysis of data</li></ul>
Fall 2022	August-December	<ul style="list-style-type: none"><li>● Complete analysis</li><li>● Write report to Omaha Children’s Museum</li><li>● Share information to peers in Teacher Education Department</li></ul>
Spring 2023	January-May	<ul style="list-style-type: none"><li>● Present at Research and Creative Activity Fair (UNO)</li></ul>

**Student/Faculty Mentor Roles:**

As a student researcher, I will be responsible for completing the FUSE grant application. My mentor, Dr. Karabon, will supervise me in identifying participants, collecting and analyzing the data, and reviewing the final report and poster presentation for the UNO Research and Creative Activity Fair. Dr. Karabon will guide me through CITI training (studying human subjects) and submitting an addendum to the IRB approval for the Investigating the Museum without Walls (MWoW) protocol. I will attend the collaborative MWoW meetings to learn about the broader project and provide weekly updates about my particular study. I will have weekly meetings with Dr. Karabon to discuss my progress and the research process.

**Budget Justification:**

In April and May, I will work 5 hours per week for an estimated six weeks. I will work ten hours per week in the summer for an estimated 12 weeks. In fall of 2022, I will work five hours per week for four weeks. For an estimated total of 170 hours, approximately \$12/hr.

\$500 will be allocated to purchase gift cards for interview and focus group participants. Gift cards will be credited at \$25 each for an estimated 20 participants. If there are leftover gift cards, they will be given out to participants at community events.

Participation stipends (20 gift cards, each credited \$25)	\$500
Student Stipend	\$2000
<b>Total FUSE</b>	<b>\$2500</b>

**References:**

- Bazeley, P., & Jackson, K. (2013). *Qualitative data analysis with NVivo* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.
- Conti-Ramsden, G., Durkin, K., Gibson, J. L., Newbury, D. F., Pickles, A., & Toseeb, U. (2020) Pathways from the early language and communication environment to literacy outcomes at the end of primary school; the roles of language development and social development. *Oxford Review of Education*, 47(2). 260-283. <https://doi.org/10.1080/03054985.2020.1824902>
- Henry, G. T., & Rickman, D. K. (2007). Do peers influence children’s skill development in preschool? *Economics of Education Review*, 26(1), 100-112. <https://doi.org/10.1016/j.econedurev.2005.09.006>
- Hochlaf, D., Jung, C., McNeil, C., Parkes, H., Statham, R. (2020). Children of the pandemic. *Institute for Public Policy Research*. Retrieved February 25, 2022, from <http://www.indiaenvironmentportal.org.in/files/file/Children-Of-The-Pandemic-Policies.pdf>
- Justice, L. M., Mashburn, A., Petscher, Y, & Schatschneider, C. (2011). Peer effects in preschool classrooms: Is language growth associated with their classmates’ skills? *Child Development* 82(6). 1768-1777. <https://doi.org/10.1111/j.1467-8624.2011.01665.x>
- Paris, S. G. (1997). Situated motivation and informal learning. *Journal of Museum Education*, 22(2-3), 22-27. <https://doi.org/10.1080/10598650.1997.11510356>

February 25, 2022

Dear Review Committee:

I am writing in support of the FUSE grant proposal, *Examining language development through play: How young children verbally interact while engaging with mobile exhibits in Museum Without Walls*, submitted by Grace Wobser. Ms. Wobser is currently enrolled as a full-time undergraduate in the Teacher Education Department. As faculty, I have known and worked with Ms. Wobser for the year as a student when she was enrolled in a six-credit hour course focused on effective planning for early childhood preservice teachers. During this class, I also observed Ms. Wobser in an Omaha Public Schools kindergarten classroom for a sixty-hour field experience.


Ms. Wobser's proposal to examine young children's linguistic use is timely to explore how children interact with children after time in quarantine due to the pandemic. For many young children under 5 years of age, the last two years were spent predominately engaging with those in the interpersonal ring of their ecological systems. This includes their families (parents), siblings, caregivers, and extended family members. Many scholars have begun to examine the effects or impacts of this time on young children's development and what that means for early childhood educators. Ms. Wobser's research project will be a great compliment to my already established *Investigating Museum Without Walls* project. The Omaha Children's Museum is creating mobile exhibits to showcase at community events to provide underrepresented and marginalized children and families exposure to the rich learning experiences at functions in their neighborhoods.

I have reviewed and approve Ms. Wobser's timeline and budget for this proposed project. She expressed the desire to compensate the participants for their time and has allocated funds to do so. The rest of the requested funding will pay Ms. Wobser for her time to conduct the research project over a few months.

My role as Ms. Wobser's mentor is to provide guidance each step of the research process- crafting the research questions, identifying literature support, how to engage with collecting and analyzing qualitative data, and with her writing of the final report and poster presentation for the UNO Research and Creative Activity Fair. I will assist Ms. Wobser in navigating IRB and CITI training. I will be present for the data collection (interviews and observations) to provide direct mentoring of ethical research methods and reflect with Ms. Wobser on the process.

Ms. Wobser is bright, energetic, compassionate, and genuinely well rounded. She demonstrates this disposition through her positivity and professionalism in her active participation in group discussions, written work, and the associated field work in the community (working with children). Ms. Wobser demonstrated that she exceeds expectations by staying after class to ask more questions and seeking constructive criticism to inform her future practice. Her ability to work effectively with a variety of adults and children is a foundation for completing her research project in the community. I believe her work on the proposed research project will undoubtedly be a success.

Sincerely,



Anne Karabon

Dr. Anne Karabon

Associate Professor, Early Childhood & STEM Education

akarabon@unomaha.edu