Mapping Children's Play in Museums and Libraries, University of Wisconsin-Madison

Introduction

University of Wisconsin-Madison's Information School and Department of Curriculum and Instruction are applying for a National Leadership Grant of $352,799 in the Applied Research category to take place from August 2024 to December 2026. The project will create a typology of existing play offerings that focuses on the different forms, purposes, materials and theoretical underpinnings of play that are supported in museums and libraries, with a specific focus on play offerings for children ages 0-12. Further, the project will investigate children's, parents' and caregivers' experiences of play offerings. This investigation will inform the development of a Diversity Audit Tool for practitioners to examine their play programs and spaces for Diversity, Equity, Inclusion, Accessibility and Belonging (DEIAB) considerations. One of the key publications, *Mapping Children's Play in Museums and Libraries,* will be a downloadable resource that includes the Diversity Audit Tool and co-designed professional training materials with prompts for practitioners to assist reflective practice for design and assessment. The project will involve three phases, with Communities of Practice (CoP) formed in Phases 2 and 3 when participants will co-design materials for the *Mapping Children's Play* publication. CoP partners for Phase 2 of the project include museums and libraries in three diverse locations in Wisconsin (urban, suburban and small town): Appleton Public Library and Appleton-based museum, Building for Kids; Madison Public Library and Madison Children's Museum; and Sun Prairie Public Library and Sun Prairie-based Explore Children's Museum. In Phase 3, we will recruit museums and library partners in other parts of the US to include greater diversity of types of museums and libraries, as well as greater geographic and demographic diversity.

In alignment with NLG program Goal 5 and objective 5.1, the aims of this project are to: 1) investigate how practitioners conceptualize and operationalize their approaches to play in museum and library spaces, and 2) co-design and implement professional development materials that focus on equity, assessment and advocacy for use in museums and libraries implementing play-based programs and spaces for children and families. The project aligns with objective 5.1 by drawing together researchers and practitioners from museums and libraries to focus on an underdeveloped area of discussion in the field (see Project Justification). Further, the project will result in a robust set of professional development materials to assist institutions in building common goals, communicating those goals to key stakeholders (other staff, children, parents, caregivers), to aid in decision making about play programming and spaces, and ultimately to benefit children and families engaged in play.

Project Justification

Research has shown the importance of play for promoting young children's (0-6 years) brain development, creativity, resiliency, and physical health (e.g., Ginsburg et al., 2007; Schlesinger et al., 2020; Yogman et al., 2018). However, in the United States, the amount of time available to children for free play is on the decline, especially for children living in poverty (Beresin, 2011; Ginsburg et al., 2007), and play is often heavily regulated both inside and outside the home (Halpern, 2003; Zygmunt-Fillwalk & Bilello, 2005). Indeed, since the 1950s, children's play has become increasingly restricted and structured by adults (Gray, 2011), creating potential infringements on children's rights as named by the United Nations Convention on the Rights of the Child. These noted declines and regulations of play have been linked to many negative academic, mental health, and physical health outcomes for children (Kumar et al., 2022). Potentially countering these play deficits, public museums and libraries, which serve as valuable community resources for many families, have been investing in programs and spaces for children's play. These programs and spaces have been designed for a range of forms of children's play: role-playing in child-sized kitchens, building with curated play materials, doing finger-play in storytimes, exploring STEM materials in makerspaces, playing chess or Minecraft (Celano et al., 2018, Mayfield, 2005). Certainly, play is considered foundational for many children's museums and libraries across the country (Gray et al., 2022; Luke et al., 2017).

The need to research play in museums and libraries: As fundamental as play is to museums and libraries, definitions and purposes for play are rarely articulated in museum and library spaces, mission statements, or on websites. Play is notoriously ambiguous, as theorists have argued, and it can be difficult to define, despite various attempts to map different types, elements, purposes and rhetorics of play (Lancy, 2015; Sutton-Smith, 1997; Zosh et al., 2018). Museums and libraries stress different purposes for play, often focusing on young children: supporting cognitive skills including early literacy and STEM, contributing to social and emotional development, and encouraging civic engagement and creativity (Gray et al., 2022; Luke et al., 2017). However, there is little research on how practitioners understand play, why they believe in the importance of play, how play-based programs align with missions of museums and libraries, or how practitioners in museums and libraries are developing play-based programming (Campana et al., 2022; Luke et al., 2017). Additionally, it is not clear how museums and libraries are developing a culture of play within their spaces, and what norms, behaviors, policies, and practices they are supporting and reinforcing. As a result, play-based programs and spaces are difficult to advocate for; professionals and parents/caregivers may be unsure of how best to support children in the spaces; assessment of programs and spaces may not occur; alignment with program/institutional goals may be overlooked; and issues such as who might be included and excluded in these spaces might be ignored. Importantly, unspoken assumptions can privilege particular ideas about play, create hierarchies around what counts as acceptable play practices, and exclude some children's experiences of play. Further, adult-centric understandings of play might misrepresent children's experiences and create environments that ignore children's agency and voice.

The need to consider diversity, equity, inclusion, accessibility and belonging (DEIAB) in play: In 2019 the Association for Library Service to Children (ALSC) put forth a National Research Agenda that specifically called for an increased scholarly focus on six areas in library and information science (LIS) work, one of which was equity, diversity, and inclusion with children and families. Within this area, the agenda called for research that could help uncover ways institutions develop, deliver, and assess inclusive programs and services; ways institutions incorporate community knowledge and traditions; and the barriers to participation in programs and services for children and families that experience marginalization or underrepresentation (ALSC, 2019). Relatedly, the American Alliance of Museums recognized in their "Excellence in DEAI" Report that museums must address equity at all levels of the organization, including in their organizational strategy, values, management, and culture (AAM, 2022), and the Association of Children's Museums echoed this commitment in their most recent strategic plan. ACM (2023) named "advancing the field through advocacy, policy, and research" as a strategic priority which will be approached through the "overarching lens" of DEAIB.

In light of these calls and commitments, there is a need to look specifically at DEIAB-related facets within museum and library play-based programming, services, and resources for children and their caregivers. Building this understanding around DEIAB in play could potentially help museums and libraries become more responsive to the varying cultural understandings of play families may have (Gosso & Carvalho, 2013; Lareau, 2011), the unequal access to meaningful play opportunities for children with (dis)abilities (Graham et al., 2017), children's own agency regarding their play, and so on. Further, Pacini-Ketchabaw (2014) and Escayg (2021) have pointed to racism and colonialism being a continual presence in children's play, citing a need for anti-racist interruptions. Previously funded IMLS projects have focused on improving museum and library practices in relation to DEIAB outcomes and goals for children and families (e.g., the Mass Action Toolkit; Project VOICE; Transforming Learning, Transforming Community). Further, Kidzu Museum received IMLS funding to develop a framework and tools to support refugee children, including auditing space and programs; and Woodlands Park Zoo received IMLS funding to create complementary resources in four languages to help parents and caregivers support children's nature play at home or in outdoor spaces in ways that feel comfortable for their families. However, these efforts have not been focused specifically on DEIAB assessment and planning in relation to children's play, which contributes to the novelty of this project.

The need to broaden conversations about play: Beyond these named facets of DEIAB in play, there is also a need to widen the field's understanding of what play might look like in museums and libraries, particularly for school-aged children (6-12 years old). Existing research on play in museums and libraries focuses primarily on young children's play and often is based on functionalist approaches, such as viewing play as important for the development of literacy or social skills. However, institutions offer play-based programs for school-aged children such as Minecraft, board games, and escape rooms; and the value of play for participants may be for affective experiences such as feelings of joy. Although when viewed through a developmental lens, play looks different at different ages and stages, play theories focus on broader understandings of play, including recognizing forms and purposes of play that cross the lifespan. For example, Sutton-Smith's (1997) rhetoric of 'play as power' incorporates children's pretend games as well as video games played by teens and adults.

In order to support play through spaces, materials, and programs, we need research aimed at helping professionals in museums and libraries articulate their ideas about play, advocate for the role of their institutions in supporting play, and make intentional decisions about play-based programs and spaces. Further, in line with existing reports and calls for action, we need to support professionals in assessing play offerings for DEIAB considerations. Finally, to be inclusive of different forms and functions of play, we need to broaden our understanding of play and to support play at different ages in museums and libraries. Research and professional development in these areas has the potential to improve play-based programs and spaces, ultimately benefiting the children and families who participate in these community spaces.

Project Work Plan

Our research questions are as follows:
1) Where and what types of play are supported in museums and libraries?
2) How do museums and libraries communicate ideas about play to children, parents and caregivers?
3) How might definitions of play, development of play-based programs, and communication about play be assessed for considerations of Diversity, Equity, Inclusion, Accessibility and Belonging (DEIAB)?
4) In what ways do practitioners in children's museums and libraries conceptualize and operationalize ideas about play?

Summary: The research questions are geared toward the development of numerous products for practitioners, academics, and other stakeholders in children's play. One of the key outputs of the project will be a publication called *Mapping Children's Play in Museums and Libraries*, which will consist of three components:
   Part 1: Types of play supported by museums and libraries
   Part 2: Diversity Audit Tool for play-based programs and spaces
   Part 3: Professional development materials
To investigate our research questions and achieve our outputs, the project will consist of three overlapping phases of work involving data collection, development of professional development tools and materials, and dissemination (see Table 1). Phase 1 will focus on the development of drafts of *Parts 1 and 2* of the *Mapping Children's Play* publication. In Phase 2, we will convene local in-person Communities of Practice with practitioners to share and revise the first two parts of the *Mapping Children's Play* publication, and we will co-design and pilot materials for *Mapping Children's Play Part 3*. In Phase 3, we will expand the project to museums and libraries in different parts of the US, employing and finalizing all parts of the *Mapping Children's Play* publication. In Phases 1 and 2, the Advisory Board will play an important role in making suggestions for revisions to drafts of the three parts of the *Mapping Children's Play* publication. In each phase, the project team will draft and submit articles aligned with the four research questions for publication in journals relevant to museum and library researchers and practitioners.

Details: Phase 1 will involve a literature review and textual analysis of a nationwide representative sample of museum and library websites and social media posts (see Research Methods). These activities will result in a

draft of *Mapping Children's Play - Part 1: Types of play supported by museums and libraries.* Part of the challenge will be to consider what we mean by "supported," given that a range of structures including play materials, adults in the space, signage, expectations for the use of spaces and so on are all part of ways museums and libraries might "support" play. We will supplement the textual analysis with in-person observations of museums and libraries in the second and third phases of the project as we revise and finalize *Part 1* of the publication. Also in Phase 1, we will conduct interviews with parents/caregivers who have children ages 0 to 12, as well as conducting interviews with children ages 4 to 12 (see Research Methods). Interview data will inform a draft of *Mapping Children's Play - Part 2: Diversity Audit Tool* by shedding light on these key stakeholders' experiences and affective relationships to play-based programs and spaces. We will hire a consultant (Ariana Flores) who is an expert in helping organizations formulate DEIAB assessments and plans. Together, we will develop the *Diversity Audit Tool* based on findings from the observational research and interviews. Phase 1 will help us answer research questions 1, 2 and 3: Where and what types of play are supported in museums and libraries? How do museums and libraries communicate ideas about play to children, parents and caregivers? How might definitions of play, development of play-based programs, and communication about play be assessed for considerations of Diversity, Equity, Inclusion, Accessibility and Belonging? During Phase 1, we will draft an academic journal article to respond to RQs 1 & 2.

In Phase 2, we will convene three Communities of Practice (CoPs) that include museums, libraries, and potentially one other existing partner such as a community center located in the same cities and are all local to each other and to UW-Madison. Researchers will assist CoPs in conducting observations and engaging in reflective practice to better understand and make decisions about supporting play in their institutions. In the CoPs, practitioners will share ideas about different types of play, purposes for play and alignment with their goals, support structures for play, role of professionals and parents/caregivers, opportunities for supporting play in their community, and so on. This phase of the research will draw on the participatory research approach referred to as co-design which has been used in educational settings (e.g., Wardrip et al., 2023; Severance et al., 2016). We will create draft co-designed materials for *Mapping Children's Play - Part 3: Professional development materials.* These materials will include activities that were successful in the CoP meetings such as a tool to assist practitioners in observing children's play. This component of the research will provide rich research data regarding practitioners' thinking about play and will help us address research question 4: In what ways do practitioners in children's museums and libraries conceptualize and operationalize ideas about play? Most of the CoP meetings will be in-person with some virtual and hybrid meetings to provide proof-of-concept for Phase 3. During Phase 2, we aim to publish an article in a professional journal such as *Children and Libraries* about types of play supported by museums and libraries.

In Phase 3, we will expand the project to develop 5 localized CoPs in other parts of the US. To ensure applicability of our work in different contexts across the US, we will recruit CoPs that represent characteristics not present in the Phase 2 CoPs (with advice from our Advisory Board), such as museums with specific purposes or libraries with primarily outdoor play programs. This phase of the project will focus on refining *Mapping Children's Play - Part 3: Professional development materials* by implementing processes developed in Phase 2 with primarily virtual support from researchers. We will make one visit to each participating institution in the nationwide CoPs to make observations and conduct an initial 'bootcamp'. Further, in Phase 3 we will finalize *Mapping Children's Play* Parts 1 and 2, and we will continue virtual meetings with the local CoPs created in Phase 2 to observe the longevity of use of *Mapping Children's Play.* Phase 3 will include time for dissemination of findings and research-based training materials.

Table 1. Timing and Sequence of Project Activities

Activities – Phase 1	**Data, Deliverables, and Research Questions (RQs)**

Aug 2024-Jan 2025: play as represented on websites and related social media from children's museums and public libraries. Conduct literature review on existing typologies of children's play; conduct analyses of websites and social media to create our own typology of children's play supported by museums and libraries.	Literature review on typologies of children's play. Observations of 80-100 institutional websites and related social media posts (RQ1, RQ2) *Mapping Children's Play* publication - draft of *Part 1: Types of play supported by museums and libraries* (RQ1) to be shared with Advisory Board for feedback.
Sept 2024 - March 2025: children's, parents' and caregivers' experiences of play and communications about play by museums and libraries. Apply for IRB approval (3-4 months), including development of research participant recruitment process and interview protocol. Conduct and analyze interviews with parents/caregivers and children who attend and do not attend play-based programs and spaces in museums and libraries.	Interview protocol, IRB approval Interviews with 20 parents/caregivers and 10-15 children who are within the service areas of the museums and libraries involved in Phase 2 (RQ1, 2, 3) Academic journal article draft (RQs 1 & 2) based on observations and interviews. Based on interviews, *Mapping Children's Play* revisions to *Part 1*, draft of *Part 2: Diversity Audit Tool* (RQ3) to be shared with Advisory Board for feedback.
Activities – Phase 2	**Data, Deliverables, and Research Questions (RQs)**
Jan 2025 - Sept 2025: Communities of Practice (CoPs) focus groups. Convene 3 Wisconsin-based CoPs, conduct introductory 'bootcamps' and monthly CoP meetings, visit and observe CoP play spaces and programs. Using the *Mapping Children's Play* (Parts 1 and 2) in these meetings, co-design and pilot professional development materials/activities for Part 3 aimed at enhancing practitioners' processes of articulation, observation, assessment, and advocacy of play-based programs and spaces.	Develop project website with initial findings and draft materials. *Mapping Children's Play* draft for *Part 3: Professional development materials* to be shared with Advisory Board for feedback. *Mapping Children's Play* Revisions to Parts 1 & 2 based on CoP feedback. Professional journal article: Types of play supported by museums and libraries (RQ1)
Activities – Phase 3	**Data, Deliverables, and Research Questions (RQs)**
Oct 2025 - Aug 2026: Nationwide Communities of Practice (CoPs) focus groups. Develop 5 localized CoPs in other parts of the US, recruited in August 2025 through applications to create a diverse group of CoPs	Finalize *Mapping Children's Play* Parts 1 & 2 based on nationwide in-person observations and CoP feedback.

(based on geography, size of institutions, and populations served); conduct introductory 'bootcamps' and monthly CoP meetings, visit and observe CoP play spaces and programs.	Finalize *Mapping Children's Play - Part 3: Professional development materials* based on nationwide CoPs. Academic journal article draft: definitions and conceptualizations of children's play in museums and libraries (RQ4)
Jan 2026 - Aug 2026: Communities of Practice (CoPs). Continue online monthly meetings with CoPs created in Phase 2, observe longevity of use of the *Mapping Children's Play* (Parts 1, 2 and 3).	Make any minor adjustments to *Mapping Children's Play* (Parts 1, 2 and 3).
Jan 2026-Dec 2026: Further dissemination activities. Finalize all academic and professional journal articles, develop conference presentations, record mini-videos to accompany *Mapping Children's Play* publication, disseminate *Mapping Children's Play*.	Academic journal article (RQ3) Professional journal article (RQ3 or 4) Conference presentations, website development (case studies, summaries of findings, mini-videos), final *Mapping Children's Play in Museums and Libraries* publication, social media campaign including dissemination through state libraries, regional museum organizations, professional forums, and contacts through CoP members and Advisory Board.

Research Methods

The project will involve multiple research methods that build on each other and are aligned with the four research questions (RQs). When collecting data on children's play, we are limiting ourselves to young and school-aged children (0-12 years). Although this is a broad age range, we intend to focus not only on developmental aspects of play which vary dramatically across these ages, but also on elements of play that are experienced by all ages, such as imaginative play or problem solving in play. Further, while younger children's play is often the focus of research, our chosen age range includes children who are offered after-school play-based programs in museums and libraries or school-aged children who 'hang out' and engage in play in these spaces after school. All research methods will be included in our IRB application. The project team has extensive experience in securing IRB approval for research with adults and children. The team will consult with contacts in the UW's IRB office who have been supportive and knowledgeable in previous successful IRB applications.

Website and social media analysis: We will analyze text and images on museum and library websites and related social media to create an initial map of the different types of play supported in museums and libraries (RQ1) and to understand how institutions are communicating ideas about play to parents, caregivers, and children (RQ2). We will conduct a purposive sample of museums and libraries from the 'Children's Museums at Home' database and IMLS Public Library survey database (focusing on libraries in the database that have a service population of over 100,000 people). Sampling will continue until we have 80-100 institutions that mention play or play-based programming on their website or social media, and we have reached data saturation (when we are not locating new types of play on offer). The analysis will be informed by a literature review that

will provide an overview of the many classifications of play that are available. This will help the analysis focus on broad categories of play such as socio-dramatic play and communication play, rather than creating categories around specific types of programming such as Lego play or Parachute play. The website and social media texts that we gather will also be used to analyze how play offerings are being communicated online to children, parents, and caregivers. These analyses will create initial findings in Phase 1 of the project that will be developed as we observe play programs in person and discuss play programming with practitioners in Phase 2.

Observations: We will observe play programming and spaces alongside practitioners who are part of the Communities of Practice (CoP) that we convene in Phases 2 and 3. In Phase 2, we will conduct 2 hours of observation at each site (12-18 hours total); and in Phase 3 we will conduct 1 hour of observation at each site (10-15 hours total). Number of hours of observation varies depending on how many members are in each CoP. For our research, we will conduct passive observations in public spaces (as allowed under the purview of our IRB). Observation protocol will be based on Carspecken's (1996) priority observation critical ethnographic method, allowing us to generate a thick primary record of children and families' interactions in spaces and programs designated for play. Priority observations center on capturing rich written observations of the actions, interactions, and larger settings by rotating the focus between various small groups or individuals over the observational period (Carspecken, 1996). Observations will contextualize play within each museum, library, or community space, paying particular attention to how the institution is communicating expectations about play or ways they provide support for play. These observations will contribute to the revision of our initial map of the types of play supported by museums and libraries (RQ1) as well as museum educators' and librarians' communication about play (RQ2). The project will also involve practitioners making observations of play and play spaces; however, these observations will not be part of the observational data set for the research project. Rather, practitioner observations will be included in the process of the development of co-designed professional materials aimed at helping professionals conceptualize and operationalize play.

Interviews: We will conduct interviews to help understand key stakeholders' experiences of play and to highlight DEIAB considerations, including barriers and enablers to participation (RQ3). Our aim is to recruit 20 parents/caregivers and 10-15 children who attend and do not attend play programs in museums and libraries, focusing on families that are within the service area of the institutions that are participating in Phase 2. We will conduct semi-structured interviews with parents/caregivers who have children ages 0 to 12, and we will conduct age-appropriate semi-structured interviews with children ages 4 to 12 (with parents present to assist the youngest children). We will recruit participants through community organizations that work with underserved populations, including neighborhood community centers, as well as through flyers posted in public spaces such as grocery stores. If we are unsuccessful in recruiting the target number of participants, we will draw on snowball sampling to recruit participants who are friends or family of the participants we are able to recruit. Interview questions will focus on parents'/caregivers' and children's experiences of play in the community, ideas about the role of play in children's lives, and their memories and feelings about play. As well as contributing to an understanding of DEIAB considerations as participants discuss their experiences of play in the community, the interview data will reveal how conceptualizations of play from professionals, parents, and children might overlap or differ.

Focus group discussions: as part of monthly CoP meetings with museum and library practitioners in Phases 2 and 3, we will conduct focus group activities, such as exercises to help facilitate discussion of conceptualizations of play (RQ4). Activities will be audio recorded, and we will create visual artifacts for analysis, such as selections of photographs of children's play alongside discussions of those photographs. Data will also include practitioners' observations of their play programs and spaces and their reflections on those observations. Initially, data will be analyzed thematically. Deeper analyses will draw on existing approaches and theoretical frameworks, particularly critical discourse analysis and categories of play identified in the literature

review in Phase 1. In addition, these focus group discussions and activities will contribute to the development of professional learning tools for our *Mapping Children's Play in Museums and Libraries* publication.

Personnel

The research team will be led by PI **Dr. Rebekah Willett** (Professor, Information School, University of Wisconsin-Madison) and Co-PI **Dr. Peter Wardrip** (Assistant Professor, Curriculum & Instruction, University of Wisconsin-Madison), experienced researchers and PIs with strong track records of publishing in areas highly relevant to the project including children's play, co-design with museum and library practitioners, formative assessment, and data-driven decision making. **Jacqueline Kociubuk** (PhD Student, University of Wisconsin-Madison) and **Tarah Connolly** (PhD Student, University of Wisconsin-Madison) join the research team as project assistants, bringing in expertise from their professional and research backgrounds in library and museum studies respectively. Members of the research team have engaged in several productive research collaborations together previously, including IMLS grant work. Joining the project in Phase 2 as CoP participants are the **Appleton Public Library**, **Building for Kids Children's Museum**, **Madison Public Library**, **Madison Children's Museum**, **Sun Prairie Public Library**, and **Explore Children's Museum**. These museums and libraries represent a diversity of size and serve varied communities through Wisconsin, and will be joined by a national representation of museums and libraries in Phase 3. An Advisory Board, consisting of representatives from museum and library scholarship and practice, will review drafts of the key project output, *Mapping Children's Play,* in January 2025, April 2025, and September 2025. Additionally, they will assist with dissemination of the publication, helping to ensure its broad reach across professional and academic sources. Advisory Board members who have agreed to participate are **Dr. Kathleen Campana** (Associate Professor, Kent State with extensive research experience on play in libraries), **Suzy Letourneau** (Research and Evaluation Associate, New York Hall of Science), **Robin Gose** (Executive Director of MOXI, the Wolf Museum of Exploration and Innovation), and **Mai Takahashi** (Children's librarian, Seattle Public Library).

Diversity Plan

Diversity, Equity, Inclusion, Access and Belonging (DEIAB) are at the heart of our project as we consider ways play can be supported and made accessible for all children, including considerations of barriers to play programs and spaces. In particular, the Diversity Audit Tool and related professional development materials will encourage and provide ways for museum and library professionals to assess their play programs and spaces for DEIAB considerations. Although previous IMLS projects including the Mass Action toolkit and Project VOICE have developed tools to help support or improve DEIAB practices in museums and libraries, there is no tool that specifically addresses DEIAB in play spaces and programming for museums and libraries. We believe that employing this tool will strengthen institutions' commitment to DEIAB practices for children's play. Further, we have developed the project to draw on and incorporate a range of voices from geographically diverse settings and with different experiences and expertise. The nationwide survey of websites and social media will ensure that the findings that inform the Diversity Audit Tool are representative of museums and libraries across the country. The interviews with parents and children who do not attend play programs in museums or libraries will be an important data set to inform the Diversity Audit Tool. The CoPs will be drawn from urban, suburban and rural settings in Phase 2, and we will include community organizations in the CoPs to further broaden the perspectives on play that are included in discussions. Further, in Phase 3, we will recruit museums and libraries for CoPs that have characteristics not represented in Phase 2. As experienced practitioners in the field, the CoPs will help shape the materials we create for the *Mapping Children's Play* publication, and the iterative process of drafting and revising the materials will allow for their ideas to be incorporated. Finally, we are drawing on a range of experts including Ariana Flores, an Equity Architect at the [Equity Project](#) with experience of creating 'equity lenses' for museums and other public institutions. Ms. Flores will be hired as a consultant to develop elements of the Diversity Audit Tool based on our findings. The Advisory Board will also incorporate expert voices from the field and include members with diverse experiences, research and practitioner perspectives, and

from a range of geographic settings. Additionally, the research team members' diverse backgrounds, as well as a varied history of professional and research practice in the library and museum fields, are an asset to the project.

Project Results

Key deliverable: The publication, *Mapping Children's Play in Museums and Libraries,* will include 1) a typology of play supported by museums and libraries, 2) a Diversity Audit Tool for play-based programs and spaces, and 3) professional development materials designed to engage practitioners in using the typology and Diversity Audit Tool as they observe and reflect on their play spaces and offerings. The publication will address the need to support professionals in articulating their own conceptualizations of play, observing play-based programs, assessing the design and use of play materials and spaces, and reflecting the extent to which the engagement in their play programs align with their intentions. In addition, the professional development materials will support professionals in assessing play offerings for DEIAB considerations by including prompts for using the Diversity Audit Tool. Finally, the publication will address the need to broaden our understanding of play and to support play at different ages in museums and libraries by providing a research-based typology of play offerings that includes play for children ages 0 to 12. *Mapping Children's Play in Museums and Libraries* will be supported with materials on our website.

Broad dissemination of research: To share this work broadly and long term, we will engage with different audiences through a website, articles, and conferences. We will have a project website where we publish *Mapping Children's Play in Museums and Libraries*, executive summaries of our findings, case studies, and conference papers. Brief videos will be available on the project website to facilitate use of the professional development materials in the *Mapping Children's Play* publication. These different elements available on the website will ensure that the *Mapping Children's Play* publication is adaptable and usable by a range of organizations including libraries, museums, neighborhood community centers, and other places where play-based programming is present. During Phase 3 of the project, we will continue to monitor the CoPs developed in Phase 2 to assess sustainability and to make final revisions to the *Mapping Children's Play* publication.

In addition to the website, project findings will be shared through academic publications, such as *Information and Learning Sciences* and the *Journal of Museum Education,* and practitioner publications, like *Hand to Hand (the publication for the Association of Children's Museums)* and *Children and Libraries*. We will also apply to present at practitioner focused conferences throughout the project including *Power Up: Leadership Conference for Youth Services Managers and Librarians*; *Play, Make, Learn* (conference hosted by UW-Madison that brings together practitioners, researchers, and entrepreneurs interested in design and practice of play and playful learning), *Connected Learning Summit* (international conference bringing together practitioners and researchers interested in informal learning spaces hosted by UC Irvine and MIT), *InterActvity* (the annual conference for the Association of Children's Museums), and annual or bi-annual conferences such as ALA, PLA, or the ALSC Institute. If we are not accepted at conferences, we will apply to present webinars for similar audiences. These results will advance knowledge about how to support play and assess play-based experiences in museums and libraries. In addition, we will learn how play can serve as a common language developed across these institutions.

Sustaining the benefits of the project: The project is designed to ensure that its impact can be sustained beyond the project funding. The *Mapping Children's Play in Museums and Libraries* publication will be openly available online after the funding of the grant, it will be flexible and adaptable, and the PIs will incorporate it into their teaching of current and future museum and library professionals. Further, all tools and resources will be publicly available on the project website, which will be hosted by UW-Madison for the foreseeable future. Thus, the benefits of this project will be sustained long beyond the funding period, as additional museums and

libraries implement the materials and as families with children play in these spaces. The museum, library, and community agency collaborative relationships that result from the CoPs will also have potential for long-term collaboration which will benefit their communities for many years beyond the funding period.

University of Wisconsin-Madison

Schedule of Completion *Mapping Children's Play in Museums and Libraries*

Activities YEAR 1	Fall 2024	Winter 2025	Spring 2025	Summer 2025
Develop interview and CoP protocol, gain IRB approval	▬▬			
Conduct literature review – typologies of play	▬▬▬			
Analyze websites and social media, create typology of play in museums and libraries	▬▬			
Write *Mapping Children's Play* draft of Part 1: Types of play supported by museums and libraries. Revise with feedback from Advisory board.		▬		
Recruit and interview parents, caregivers and children; Analyze interview data	▬	▬▬▬		
Write *Mapping Children's Play* draft of Part 2: Diversity Audit Tool. Revise with feedback from Advisory board.			▬▬	
Dissemination: Write draft academic journal article (RQs 1 and 2) and professional journal article (RQ1)			▬▬▬	
Convene and run CoP meetings (Phase 2)		▬▬▬▬	▬▬▬	▬▬▬
Write *Mapping Children's Play* draft *Part 3: Professional development materials.* Revise with feedback from Advisory Board. Revise Parts 1 & 2 with CoP feedback.				▬▬▬
Dissemination: Build project website, conference presentations (Play, Make, Learn; Connected Learning), publish professional journal article			▬▬	▬▬▬

Activities YEAR 2 +	Fall 2025	Winter 2026	Spring 2026	Summer 2026	Fall 2026
Convene and run nationwide CoP meetings (Phase 3)	▬▬▬	▬▬▬	▬▬▬		
Finalize and design *Mapping Children's Play Parts 1, 2 & 3.*			▬▬▬		
Write academic journal articles (RQs 3 & 4) and professional article (RQ3 or 4)	▬▬	▬▬▬	▬▬▬	▬▬▬	▬▬▬
Develop mini-videos and case studies to accompany *Mapping Children's Play* publication.		▬▬▬	▬▬▬	▬▬▬	▬▬▬
Maintain project website. Disseminate *Mapping Children's Play* and website materials through social media campaign.		▬▬▬	▬▬▬	▬▬▬	▬▬▬
Disseminate findings & analysis through conference presentations.			▬▬▬	▬▬▬	▬▬▬

DIGITAL PRODUCT FORM

Introduction

The Institute of Museum and Library Services (IMLS) is committed to expanding public access to federally funded digital products (e.g., digital content, resources, assets, software, and datasets). The products you create with IMLS funding require careful stewardship to protect and enhance their value, and they should be freely and readily available for use and re-use by libraries, archives, museums, and the public. Because technology is dynamic and because we do not want to inhibit innovation, we do not want to prescribe set standards and practices that could become quickly outdated. Instead, we ask that you answer questions that address specific aspects of creating and managing digital products. Like all components of your IMLS application, your answers will be used by IMLS staff and by expert peer reviewers to evaluate your application, and they will be important in determining whether your project will be funded.

Instructions

All applications must include a Digital Product Form.

☐ Please check here if you have reviewed Parts I, II, III, and IV below and you have determined that your proposal does NOT involve the creation of digital products (i.e., digital content, resources, assets, software, or datasets). You must still submit this Digital Product Form with your proposal even if you check this box, because this Digital Product Form is a Required Document.

If you ARE creating digital products, you must provide answers to the questions in Part I. In addition, you must also complete at least one of the subsequent sections. If you intend to create or collect digital content, resources, or assets, complete Part II. If you intend to develop software, complete Part III. If you intend to create a dataset, complete Part IV.

Part I: Intellectual Property Rights and Permissions

A.1 What will be the intellectual property status of the digital products (content, resources, assets, software, or datasets) you intend to create? Who will hold the copyright(s)? How will you explain property rights and permissions to potential users (for example, by assigning a non-restrictive license such as BSD, GNU, MIT, or Creative Commons to the product)? Explain and justify your licensing selections.

The resources that are produced from this project will be made freely available to download from a web site. The resources will be licensed under Creative Commons in a non-commercial, ShareAlike attribution, which will allow others to modify and build upon the resources as long as the members of the project are credited.

A.2 What ownership rights will your organization assert over the new digital products and what conditions will you impose on access and use? Explain and justify any terms of access and conditions of use and detail how you will notify potential users about relevant terms or conditions.

We wish to have the resources produced from this project to be made available broadly and easily. As mentioned above, we will allow others to modify and build upon the resources as long as the members of the project are credited.

A. 3 If you will create any products that may involve privacy concerns, require obtaining permissions or rights, or raise any cultural sensitivities, describe the issues and how you plan to address them.

We will not create any resources that involve privacy concerns.

Part II: Projects Creating or Collecting Digital Content, Resources, or Assets

A. Creating or Collecting New Digital Content, Resources, or Assets

A.1 Describe the digital content, resources, or assets you will create or collect, the quantities of each type, and the format(s) you will use.

We will produce professional learning resources and supports for this project. We are unable to know the exact number, but all will be accessible for free on a web site. There will be no restriction on how many downloads someone makes.

A.2 List the equipment, software, and supplies that you will use to create the content, resources, or assets, or the name of the service provider that will perform the work.

The tools will be made on regular software that one might find on their office laptop. This might include the Microsoft Office suite, as well as Adobe tools. Regardless of the tools, the resources will be accessible as pdfs on the web site to provide easy access to those interested.

A.3 List all the digital file formats (e.g., XML, TIFF, MPEG) you plan to use, along with the relevant information about the appropriate quality standards (e.g., resolution, sampling rate, or pixel dimensions).

We plan to use the PDF format for our files. If we make available the powerpoint slides from our presentations, we will convert these to PDF and make these available.

B. Workflow and Asset Maintenance/Preservation

B.1 Describe your quality control plan. How will you monitor and evaluate your workflow and products?

The digital tools are simply a deliverable for other practitioners to engage with what we learn through the project. As we complete each phase of the project, we will upload resources as they are ready. As resources are refined, such as professional learning tools, we will update the resources if anything changes. We will assign one person from the UW Madison team to ensure that products are uploaded and that person can serve as a point of contact in case there are questions.

B.2 Describe your plan for preserving and maintaining digital assets during and after the award period of performance. Your plan may address storage systems, shared repositories, technical documentation, migration planning, and commitment of organizational funding for these purposes. Please note: You may charge the federal award before closeout for the costs of publication or sharing of research results if the costs are not incurred during the period of performance of the federal award (see 2 C.F.R. § 200.461).

The UW Madison team will maintain the web site after the term of the grant. University of Wisconsin has success maintaining project web sites and has a dedicated team to assist in this process.

C. Metadata

C.1 Describe how you will produce any and all technical, descriptive, administrative, or preservation metadata. Specify which standards you will use for the metadata structure (e.g., MARC, Dublin Core, Encoded Archival Description, PBCore, PREMIS) and metadata content (e.g., thesauri).

The digital resources that we produce will not need to adhere to any metadata in support of their free availability.

C.2 Explain your strategy for preserving and maintaining metadata created or collected during and after the award period of performance.

The digital resources that we produce will not need to adhere to any metadata in support of their free availability. Therefore, we will not need to preserve or maintain the metadata.

C.3 Explain what metadata sharing and/or other strategies you will use to facilitate widespread discovery and use of the digital content, resources, or assets created during your project (e.g., an API [Application Programming Interface], contributions to a digital platform, or other ways you might enable batch queries and retrieval of metadata).

The digital resources that we produce will not need to adhere to any metadata in support of their free availability.

D. Access and Use

D.1 Describe how you will make the digital content, resources, or assets available to the public. Include details such as the delivery strategy (e.g., openly available online, available to specified audiences) and underlying hardware/software platforms and infrastructure (e.g., specific digital repository software or leased services, accessibility via standard web browsers, requirements for special software tools in order to use the content).

A web site will house all of the available resources from the project. These resources will be free to download by the public. These resources will be free to download as many times as an individual wishes. When we disseminate the deliverables and findings from the project, we will direct practitioners to the web site.

D.2 Provide the name(s) and URL(s) (Uniform Resource Locator) for any examples of previous digital content, resources, or assets your organization has created.

https://librarymuseumlearning.wiscweb.wisc.edu/

Part III. Projects Developing Software

A. General Information

A.1 Describe the software you intend to create, including a summary of the major functions it will perform and the intended primary audience(s) it will serve.

We do not intend to develop software.

A.2 List other existing software that wholly or partially performs the same functions, and explain how the software you intend to create is different, and justify why those differences are significant and necessary.

We do not intend to develop software.

B. Technical Information

B.1 List the programming languages, platforms, software, or other applications you will use to create your software and explain why you chose them.

We do not intend to develop software.

B.2 Describe how the software you intend to create will extend or interoperate with relevant existing software.

We do not intend to develop software.

B.3 Describe any underlying additional software or system dependencies necessary to run the software you intend to create.

We do not intend to develop software.

B.4 Describe the processes you will use for development, documentation, and for maintaining and updating documentation for users of the software.

We do not intend to develop software.

B.5 Provide the name(s) and URL(s) for examples of any previous software your organization has created.

We do not intend to develop software.

C. Access and Use

C.1 We expect applicants seeking federal funds for software to develop and release these products under open-source licenses to maximize access and promote reuse. What ownership rights will your organization assert over the software you intend to create, and what conditions will you impose on its access and use? Identify and explain the license under which you will release source code for the software you develop (e.g., BSD, GNU, or MIT software licenses). Explain and justify any prohibitive terms or conditions of use or access and detail how you will notify potential users about relevant terms and conditions.

We do not intend to develop software.

C.2 Describe how you will make the software and source code available to the public and/or its intended users.

We do not intend to develop software.

C.3 Identify where you will deposit the source code for the software you intend to develop:

We do not intend to develop software.

Part IV: Projects Creating Datasets

A.1 Identify the type of data you plan to collect or generate, and the purpose or intended use to which you expect it to be put. Describe the method(s) you will use and the approximate dates or intervals at which you will collect or generate it.

The purpose of this project is not to make a dataset available. We will not be making a dataset available.

A.2 Does the proposed data collection or research activity require approval by any internal review panel or institutional review board (IRB)? If so, has the proposed research activity been approved? If not, what is your plan for securing approval?

The purpose of this project is not to make a dataset available. We will not be making a dataset available.

A.3 Will you collect any personally identifiable information (PII), confidential information (e.g., trade secrets), or proprietary information? If so, detail the specific steps you will take to protect such information while you prepare the data files for public release (e.g., data anonymization, data suppression PII, or synthetic data).

The purpose of this project is not to make a dataset available. We will not be making a dataset available.

A.4 If you will collect additional documentation, such as consent agreements, along with the data, describe plans for preserving the documentation and ensuring that its relationship to the collected data is maintained.

The purpose of this project is not to make a dataset available. We will not be making a dataset available.

A.5 What methods will you use to collect or generate the data? Provide details about any technical requirements or dependencies that would be necessary for understanding, retrieving, displaying, or processing the dataset(s).

The purpose of this project is not to make a dataset available. We will not be making a dataset available.

A.6 What documentation (e.g., data documentation, codebooks) will you capture or create along with the dataset(s)? Where will the documentation be stored and in what format(s)? How will you permanently associate and manage the documentation with the dataset(s) it describes?

The purpose of this project is not to make a dataset available. We will not be making a dataset available.

A.7 What is your plan for archiving, managing, and disseminating data after the completion of the award-funded project?

The purpose of this project is not to make a dataset available. We will not be making a dataset available.

A.8 Identify where you will deposit the dataset(s):

The purpose of this project is not to make a dataset available. We will not be making a dataset available.

A.9 When and how frequently will you review this data management plan? How will the implementation be monitored?

The purpose of this project is not to make a dataset available. We will not be making a dataset available.