

Project VOICE Abstract

Project VOICE (Value sensitive design of Outcomes Informing Community Engagement) is a proposed Laura Bush 21st Century Librarian grant initiative, in the category of Research in Service to Practice, that will take place from September 2019-August 2022. The purpose of this grant is to research and develop a social justice, outcomes-based planning and assessment toolkit that provides hands-on assistance for library staff who want to better support young children (ages zero to eight) and their families from underserved communities through outreach programs and services that nurture children's early learning and development with an emphasis on equity, engagement, and empowerment. Kent State University (KSU) is the lead applicant, with University of Washington (UW) as a subaward. State libraries in Colorado, Ohio, South Carolina, and Washington are partnering with KSU and UW to provide connections to a diverse range of libraries of different sizes and from various geographical locations that are reaching outside of their walls in their communities. OCLC will also be partnering with KSU and UW to provide a platform for training of the participants and user testing of the toolkit. Community- and library-based stakeholders will provide guidance as part of a 9-person Strategic Advisory Board. Additionally, state library youth consultants will form a Partner Board to provide additional expertise.

As a part of their study on family engagement, PLA and the Global Family Research Project recommended that "libraries need to be actively and intentionally reaching out to disadvantaged families, empowering them to lead their children to successful educational pathways." However, in-library programs and services may not be reaching the families who need the support most of all. In fact, studies are showing that where socioeconomic status is lowest, families are less likely to come to programs and services offered at the library. When families cannot or do not come into the library to take advantage of the available in-house programs and services, they miss out on important, free resources. These families could benefit from library services that are offered out in the community to engage them holistically and provide an understanding of how to support their children's learning and development. By going out into the community to offer targeted programs and services, based on these families' needs, libraries could be more effective in helping all families support their child(ren)'s learning and development, especially those not coming into the library.

Project LOCAL (Library Outreach as a Community Anchor in Learning), an IMLS NLG Planning grant, sought to understand how libraries are providing outreach programs and services in community locations for families and children in underserved communities. While library staff were providing a wide range of outreach programs, they also indicated a strong interest in expanding this programming. We also found that many of the participants struggled with how to develop these programs around identified community needs and how to assess their outreach programs and services in a meaningful way to help with advocacy and sustainability. This could stem from a reported lack of knowledge about how to approach outcomes-based planning and assessment of their outreach programs. During Project LOCAL it also became apparent that libraries could do more to engage and empower these families. The concept of social justice centers around empowering those traditionally underserved within communities. Employing a social justice model as the foundation of Project VOICE ensures that this research constantly upends the power dynamics that often keep underserved communities marginalized.

Project VOICE is guided by the overarching research question and the following sub-questions, all of which relate to the project's goals of helping libraries become catalysts for learning with their entire community: *'How might a social justice, outcomes-based approach to the production of public library outreach programs enable library staff to lift up the voices of traditionally marginalized families to promote equity, engagement, and empowerment in their communities?'* **RQ1:** How, if at all, are public library staff incorporating equity, engagement, and empowerment into their production of outreach programs and services for children, ages 0-8, and families in various underserved communities around the country? **RQ2:** What are the experiences and perceptions of various stakeholders (families, community partners) who participate in and/or help facilitate these outreach programs and services? **RQ3:** How might value sensitive, participatory design workshops enable public library staff to build a social justice, outcomes-based toolkit to plan, deliver, and assess these outreach programs and services? **RQ4:** What are the affordances and challenges of planning, delivering, and assessing these outreach programs and services using a social justice, outcomes-based toolkit? What impact do these programs and services have on the experiences and perceptions of the various stakeholders who participate? The study will utilize case studies, interviews, focus groups and value-sensitive, participatory design workshops where library staff will collaborate with the research team on the toolkit design process--iterating, testing, and reflecting on the toolkit and its affordances and challenges for 1) outcomes-based outreach programming, 2) empowering traditionally marginalized voices, and 3) engaging with families and community partners as a crucial part of the outreach development in their community. From these activities, Project VOICE will yield a collaboratively designed, practitioner-focused toolkit, which embeds social justice principles of equity, engagement, and empowerment into the production process of public library outreach programs offered for children, ages 0-8, and families.

PROJECT VOICE: Value sensitive design of Outcomes Informing Community Engagement

Project VOICE (Value sensitive design of Outcomes Informing Community Engagement) is a proposed Laura Bush 21st Century Librarian grant initiative, in the category of Research in Service to Practice, that will take place from September 2019-August 2022. The purpose of this grant is to research and develop a social justice, outcomes-based planning and assessment toolkit that provides hands-on assistance for library staff who want to better support young children (ages zero to eight) and their families from underserved communities through outreach programs and services that nurture children's early learning and development with an emphasis on equity, engagement, and empowerment. Our overarching research question asks, *"How might a social justice, outcomes-based approach to the production of public library outreach programs enable library staff to lift up the voices of traditionally marginalized families to promote equity, engagement, and empowerment in their communities?"*. This general question will be answered through a triangulation of qualitative and design methods including case studies and focus groups, value sensitive and participatory design workshops, and online synchronous webinars. This grant will yield a collaboratively designed, practitioner-focused toolkit, embedding social justice principles of equity, engagement, and empowerment into the production process of outreach programs in public libraries. Libraries will collaborate with the research team on the design process, iterating, testing, and reflecting on the toolkit and its affordances and challenges for 1) offering outcomes-based outreach programming, 2) empowering traditionally marginalized voices in the community, 3) sharing information back with the community, and 4) engaging with families and community partners as a crucial part of the outreach development in their community. Kent State University (KSU) is the lead applicant, with University of Washington (UW) as a subaward. State libraries in Colorado, Ohio, South Carolina, and Washington are partnering with KSU and UW to provide connections to a diverse range of libraries of different sizes and from various geographical locations that are reaching outside of their walls in their communities. OCLC will also partner with KSU and UW to provide a platform for training of the participants and user testing of the toolkit.

1. STATEMENT OF BROAD NEED

Libraries as community catalysts for early learning: Libraries are strong supporters of learning for children in their communities. Research on the two most prevalent public library programs for children—storytimes and summer reading/learning—has revealed that they do support learning. Storytimes can encourage an array of skills in early literacy (Campana et al., 2016; Becker, 2012; McKechnie, 2006) and other learning domains for young children (Campana, 2018). Furthermore, it has been recommended that summer reading programs, which include a variety of literacy activities, should target children in high-need populations who could most benefit from the support provided by the programs (Dynea, Piasta, & Justice, 2015). In addition to these two types of programs, libraries offer a variety of other programs with the goal of providing educational and enjoyable experiences for children. Libraries often dedicate extensive time and effort to what McKenzie and Stooke (2007) refer to as "producing" their programs in order to support a variety of learning domains in a fun, hands-on, engaging manner. Mills, Campana, and Clarke (2016) elaborate on this idea of "producing" programs by detailing storytime production as a three-part process that includes planning, delivery, and assessment. This process is crucial for developing iterative programs that can grow and evolve to meet the needs of their communities. Given that libraries are being asked to expand their programs to include family engagement and intergenerational learning, they could benefit from tools and resources that can support this program production process.

Libraries and family engagement: Family engagement, as a concept, has been well-documented in the education field. The National Association for the Education of Young Children (NAEYC) suggests that family engagement should occur as a continuous partnership between families and the child's learning environments. By placing an emphasis on engagement, organizations are starting from the understanding that all families are working to support their child's learning and development. The focus then becomes the methods by which informal learning organizations can partner with families to support the learning and development of their young children (Halgunseth, Peterson, Stark, & Moody, 2009). Recently the library field has placed an emphasis on this by identifying the whole family as an important part of their programs, education, and resources. The Public Library Association (PLA) and the Global Family Research Project conducted a study on family engagement funded by the David and Lucile Packard Foundation. The study, 'Libraries for the 21st Century: It's a Family Thing,' has worked to understand how libraries are engaging families, introducing The 5Rs Framework, which identifies Reach out, Raise up, Reinforce, Relate, and Reimagine as "five important processes that build successful family engagement pathways" (Caspe, Jeske, & Graham, 2016). In addition, they recommend that "libraries need to be actively and

intentionally reaching out to disadvantaged families, empowering them to lead their children to successful educational pathways” (Lopez, Caspe, & McWilliams, 2016, p. 10).

Engaging Families in Underserved Communities Through Outreach: While libraries are working to engage families in their communities through a variety of in-library programs and services, some researchers and practitioners have realized that these programs and services may not be reaching the families who may need the support most of all (Neuman & Celano, 2012; Prendergast, 2011; Stooke, 2006). In fact, studies are showing that where socioeconomic status is lowest, families seem less likely to come to, and make use of, programs and services offered at the library (Howard 2013). When families cannot or do not come into the library to take advantage of the available in-house programs and services, they miss out on important, free resources. These families could benefit from library services that are offered out in the community to engage them holistically and provide an understanding of how to support their children's learning and development. By responding to the needs of these families and going out into the community to offer targeted programs and services, based on their needs, libraries could be more effective in helping all families support their child(ren)'s learning and development, especially those not coming into the library.

Project LOCAL: Project LOCAL (Library Outreach as a Community Anchor in Learning), an IMLS NLG Planning grant on which Project VOICE is based, sought to understand how libraries are going outside of their walls to provide programs and services in community locations for families and children in underserved communities. Our goals for this study were to: 1) establish a baseline understanding of current practice in libraries' family outreach efforts to underserved communities; 2) help the broader library community potentially increase their reach and service, through replication of programs, for families in underserved communities who do not come into and utilize the library; and 3) provide a foundation for a future research grant. In this study we defined outreach as a method of providing programs and services out in community locations, often with community partners, to reach those who do not or cannot come into the library to serve them where they are (Mills, Campana, & Martin, in press).

Our overall research question asked, ‘How, if at all, are public libraries currently reaching beyond their walls to serve families in underserved communities who do not come into and utilize the library?’ Our sub-questions were: RQ1: How, if at all, are libraries working to understand the needs of families in underserved communities who do not come into and utilize the library? RQ2: What are libraries offering in terms of programs and services that take place outside of library walls to reach families from underserved communities who do not come into and utilize the library? RQ3: What do libraries perceive as challenges to developing and delivering programs/services outside of library walls for families in underserved communities who do not come into and utilize the library? To answer these questions, we conducted focus groups, virtual interviews, and a national survey. Together this involved more than 160 library staff and administrators from small, medium, and large; urban, suburban, and rural libraries in 27 states. This data provided a holistic approach to understanding outreach programs and services. Overall, we found that libraries were offering a wide variety of types of programs and services in community locations to reach and serve children and families in underserved communities. The participating library staff identified many underserved communities that they were supporting through these programs and services, including individuals with low income, those with low literacy, immigrants and New Americans, and those experiencing homelessness, as well as some in African American and Latinx communities who have experienced marginalization. Similarly, we learned about the ways library staff gather community data to learn what communities would like from their library. While libraries have indicated a strong interest in expanding their outreach programming, we found that not all libraries knew how to translate this community data into impactful program development. Furthermore, a majority of the participants struggled with how to assess their outreach programs and services in a meaningful way to help with advocacy and sustainability. This could stem from a reported lack of knowledge about how to approach outcomes-based planning and assessment of their outreach programs.

Assessment: The difficulties with outreach program assessment that emerged during Project LOCAL are significant as assessment has been gaining recognition as an important aspect of public library operations. Historically, many libraries have focused on collecting output numbers (program attendance and circulation statistics) and participant satisfaction reports (Irwin & St. Pierre, 2014). More recently though, many in the field have recognized that assessment measures can, and should, go deeper by examining outcomes and impact (Becker, 2015; Irwin & St. Pierre, 2014), and should be used for a wider variety of purposes, such as professional development, future program development, advocacy, and more (Mills et

al., 2015; Irwin & St. Pierre, 2014). In fact, Dresang, Gross, and Holt (2006) developed the Outcome-based Planning and Evaluation (OBPE) model for planning and assessing library youth programs around outcomes. Their original model identified four phases: gathering information, determining outcomes, developing programs and services, and conducting evaluations. Assessment is a crucial aspect of the program and service lifecycle because it can provide data for advocacy, community needs, more effective services, and to inform professional development. Many of the participating library staff in Project LOCAL recognized the importance of assessment and expressed a desire to learn how to assess their programs thus providing information for advocacy and sustainability of their outreach programs. For this reason, we will be focusing our toolkit in part around assessment as it is integral to the program production process. Our toolkit will be informed by the OBPE model (Dresang, Gross, & Holt, 2006; Gross et al., 2016).

Social justice: During Project LOCAL it became apparent that while libraries were offering programs and services out in community locations to reach and serve children and families in underserved communities, libraries could do more to engage and empower these families. This is also acknowledged in Urban Libraries Council's Statement on Race and Social Equity where 144 public libraries have committed to five tenets for working towards equity in their communities: one of which is "ensuring that we are reaching and engaging disenfranchised people in the community and helping them express their voice" (ULC, n.d.). The concept of social justice centers around empowering the community and those traditionally underserved within communities. Employing a social justice model as the foundation of Project VOICE ensures that this research constantly upends the power dynamics that often keep underserved families and communities marginalized (Cooke, Sweeney, & Noble, 2016). Research has underscored the importance of promoting social justice through library programs and services for the community (Rankin, 2016), while scholars have also identified the significance of social justice for the LIS field, acknowledging it as a "defining issue" (Jaeger et al., 2014), "guiding principle" (Jaeger, Shilton, & Koepfler, 2016), and an "LIS value" (Cooke, Sweeney, & Noble, 2016). Some common threads have emerged in LIS social justice research, including: equity (Gibson et al., 2017; Cooke, Sweeney, & Noble, 2016); inclusion and/or engagement (Gibson et al. 2017; de la Pena McCook, 2001); diversity (de la Pena McCook, 2001); representation (Naidoo, 2013) and more. Mathiesen (2015) provides a more specific focus for social justice in the library field, calling it "informational justice" and focusing on people as users, seekers, and sources of information. She identifies three aspects of social justice that are relevant to the library field: distribution—how resources are distributed; participation—the capability of all people to participate; and recognition—recognizing how all people, cultures, and communities are represented. As we develop the social justice, outcomes-based planning and assessment toolkit with our participants, we will be considering these three aspects of social justice as part of our training and design framing.

Research from outside of the library field can also provide insight into social justice as a concept and how to approach and support it. In fact, Mathiesen's (2015) three aspects of social justice appear to be based on Fraser's well-known social justice theory, which includes three dimensions of redistribution, recognition, and representation (Brownlee et al., 2012). In her view, working towards social justice means "dismantling institutionalized obstacles that prevent some people from participation on par with others" (Brownlee et al., 2012, p. 20). Another social justice framework is the capability approach, developed by Sen (1992), which places a focus on capabilities as what people are able to do rather than what resources they have access to. The goal with social justice is to expand people's capabilities to be able to lead a life that they value (Robeyns, 2005). Sen encourages a participatory approach of letting people identify the capabilities they value for themselves, rather than having capabilities imposed upon them (Kleine, Light, & Montero, 2012). Kleine (2010) builds on the capability approach by incorporating Alsop and Heinsohn's Degrees of Empowerment to create the Choice framework. The Choice Framework places empowerment at the center by accounting for the resources a person has access to in helping them to navigate society and empowering them to move from capabilities (what they are able to do) to outcomes (what they actually achieve) (Kleine, 2010). Gomez, a co-PI on the proposed research, has previously used the Choice Framework to look at mobile phone use as a capability enhancement in southern Ghana (Yim & Gomez, 2018). We will employ a participatory design approach in our design workshops to emphasize the library staffs' capabilities to create this toolkit together and to encourage the library staff to empower their communities to identify their own capabilities in helping shape the outreach program production.

Purpose and Context of the Research: The purpose of this grant, in the category of Research in Service to Practice, is to research and develop a social justice, outcomes-based planning and assessment toolkit that provides hands-on assistance

for library staff who want to better support young children (ages zero to eight) and their families from underserved communities through outreach programs and services that nurture children's early learning and development with an emphasis on equity, engagement, and empowerment. To do this, our study seeks to holistically examine: 1) the production process for outreach programs that libraries are offering out in the community for children and families in underserved communities; 2) stakeholders' perceptions and experiences of these programs through a triangulation of the voices of the librarians, families, and community partners; 3) affordances and challenges of a social justice, outcomes-based planning and assessment toolkit; and 4) how these programs can promote aspects of social justice including equity, engagement, and empowerment while also supporting learning for the young children (ages zero to eight) and families who attend.

Our lens of engagement, equity, and empowerment emerged directly from the body of social justice research discussed above. We will be supplementing this lens with the application of a strengths-based perspective, starting from the premise that every child, family, community, and library has resources and capabilities. A strengths-based perspective also includes: 1) acknowledging people's capabilities; 2) emphasizing strength in all efforts with communities; 3) supporting collaboration for individuals and communities; 4) avoiding the use of a victim mindset; and 5) making efforts to incorporate community resources (Martinez & Ulanoff, 2013).

Intended Audiences: The primary intended audience for this grant is children's library staff seeking guidance on how to reach out to families and children in underserved communities in an equitable way and how to expand their outreach efforts outside of the library walls. Secondary audiences include administrators, state libraries, community partners, and others who want to empower and engage their community members through social justice, outcomes-based outreach initiatives.

Relevance to Libraries as Community Catalysts: This project supports the Community Catalyst project category in three ways. Our case studies and participatory design workshops will *explore and develop improved and/or potentially replicable participatory library programming models that engage communities and individuals of diverse cultural and socioeconomic backgrounds*; our social justice, outcomes-based toolkit will *focus on enhancing opportunities and well-being in communities and increase equity and access*; and our partnerships with practitioners will *investigate widespread community challenges that are informed by current library practice, and feature mutually beneficial relationships between researchers and practitioners*.

In addition, we believe that this project will lead to more effective production of outreach programs and services for children and families in underserved communities, ideally helping to increase the production and sustainability of these types of programs. We have already written a community anchor roadmap of libraries' current outreach practices for reaching and serving families in underserved communities, based on the Project LOCAL findings, which will be adopted and published as a white paper by the Association for Library Service to Children (ALSC) at ALA Annual 2019 (See Supportingdoc5). Our prior research has revealed that sharing these practices within the library field is important because librarians seek opportunities to learn from and adopt each other's effective practices (Mills et al., 2015; Campana et al., 2014). We anticipate that the roadmap and potential findings from Project VOICE (if funded) will result in a growth in the number and types of outreach programs offered by libraries for children and families in underserved communities that promote engagement, equity, and empowerment. Programs such as these could enable libraries to catalyze underserved communities, empowering them to take an active role to support learning for all children and families in their community. In addition, this project emphasizes a strengths-based approach to community engagement rather than the deficit thinking that often prevails, particularly when racial and socioeconomic gaps exist between the library staff and those in the surrounding community. Project VOICE will ask participating librarians to center the community and their needs, which may be a significant paradigm shift for some, but if libraries are to serve as effective community catalysts, the needs and aspirations of those communities must emerge from community members.

Need expressed in letters of support (See Supportingdocs 2-3 for the letters). The field also sees the potential benefits of this work, which can be seen from the following representative comments from the letters of support. According to PLA, "Project VOICE will help build on and extend the findings of *Libraries for the 21st Century: It's a Family Thing* by providing an understanding of how libraries can be more intentional and targeted in their efforts to engage and empower children and families in underserved communities." According to ODLOS¹, "[We] use a social justice framework to decentralize power and privilege through facilitated conversations around access and identity as they impact the profession and those we serve.

¹ ALA's Office for Diversity, Literacy, and Outreach Services

Project VOICE's focus on social justice through the research on public library outreach directly furthers our mission statement and fits within our organizational framework." According to ARSL, "Libraries working with underserved populations is a critical component of outreach and helps to assure that libraries are strong partners in creating and sustaining vibrant communities. Project VOICE has the potential to provide an important tool to ensure that small and rural libraries across the country have the opportunity to work with their communities to invest in new ways to reach underserved populations. ARSL looks forward to being able to share the results of the project and the tools created from the project with our members." According to ALSC, "The social justice frame that the research team has chosen to take with this proposal aligns with ALSC's commitment to strive for, "healthy, successful futures for all children," to which equitable access to resources is one of the greatest challenges."

2. PROJECT DESIGN (For Details of Timeline see Schedule of Completion) The more prevalent outreach outside of library walls becomes, the more important it will be for librarians to understand their communities. Our findings from Project LOCAL clearly demonstrate a persistent gap in libraries' understanding, not only how to leverage their repositories of community data to implement data-driven program development, but also how to determine and then measure program outcomes in order to communicate successes and areas for growth. Project VOICE can be instrumental in helping libraries center community and family engagement responsibly, sensitively, and with social justice and equity at the forefront of that engagement. The following goals and outcomes will serve to demonstrate the achievability of this purpose.

Goal 1—Supporting the outreach production process: Help library staff 1) to be more effective in how they produce their outreach programs, including development, delivery, and assessment of their outreach work with young children and families in underserved communities; and 2) to become aware of how to produce programs and services that promote equity, engagement, and empowerment for these families across the nation.

Outcome: A social justice, outcomes-based toolkit, built collaboratively with library staff, that includes effective practices, processes, and resources to emphasize community-led outreach program production.

Goal 2—Implementing design thinking into the outreach production process: Demonstrate how value sensitive, participatory design principles and techniques can offer library staff a way to approach community listening and discussions in thoughtful, equitable ways.

Outcomes: 1) A curriculum around social justice outreach work, value sensitive participatory design, and outcomes-based assessment that can be provided to the larger library field, and 2) a template for social justice-based, participatory design workshops for practitioners to address current challenges using design theories and techniques in a reflective, iterative way.

Goal 3—Building library community awareness: Gain an awareness into the perceptions and desires that families and community partners have for outreach services in underserved communities.

Outcome: Deep profiles of current and ongoing outreach work to reach and serve families in underserved communities, provided through publications and conference presentations, that offer insight into the perceptions and desires of families and community partners to inform wider practice.

Goal 4—Building library peer community: Develop peer networks for library staff that offer mentoring and support for developing, implementing, and sustaining social justice, outcomes-based outreach work.

Outcome: Provide an online community forum for library staff to use during the toolkit testing period to collaboratively problem solve and address challenges and opportunities around offering social justice outreach programs and services for families and children in underserved communities.

Research Questions: The research is guided by the overarching question: "*How might a social justice, outcomes-based approach to the production of public library outreach programs enable library staff to lift up the voices of traditionally marginalized families to promote equity, engagement, and empowerment in their communities?*" This general question is informed by the following specific research questions (RQ), all of which relate to the project's goals of helping libraries become catalysts for learning in their entire community.

RQ1: How, if at all, are public library staff incorporating equity, engagement, and empowerment into their production of outreach programs and services for children, ages 0-8, and families in various underserved communities around the country?

RQ2: What are the experiences and perceptions of various stakeholders (families, community partners) who participate in and/or help facilitate these outreach programs and services?

RQ3: How might value sensitive, participatory design workshops enable public library staff to build a social justice, outcomes-based toolkit to plan, deliver, and assess these outreach programs and services?

RQ4: What are the affordances and challenges of planning, delivering, and assessing these outreach programs and services using a social justice, outcomes-based toolkit? What impact do these programs and services have on the experiences and perceptions of the various stakeholders who participate?

Methods: In Project VOICE, we are employing a triangulation of qualitative methods—embedded and multi-site case studies with focus groups; value sensitive and participatory design workshops; and reflective peer interaction through online webinars—to facilitate the development and testing of a social justice, outcomes-based assessment toolkit for outreach. We will also be implementing the same iterative design we used in LOCAL, in which the data collected in one phase will inform the data collection in the next phase. This will be explained in greater detail in the summaries following the Phase tables below. The study includes two phases, each taking place over 1.5 years of the study.

PHASE 1: Research and Design (September 1, 2019 - December 31, 2020)

Data Collection Method/RQs	Participants	Analysis	Anticipated Findings
12 embedded multi-site case studies in rural/urban/suburban libraries in four states: Colorado, Ohio, South Carolina, Washington (interviews, observations, document analysis, environmental scans, etc). <i>RQs 1, 2</i>	Library staff from CO, OH, SC, and WA who offer outreach programs; community partners and families at each library’s outreach programs.	Inductive thematic analysis ² and content analysis ³ of transcripts, documents, and other materials collected.	Deep understanding of scope and resources of various outreach programs taking place across the country; current practices and gaps around assessment and social justice tenets of equity, empowerment, and engagement in outreach production; needs and aspirations of stakeholders for outreach programs. These findings will lay the groundwork for the value sensitive and participatory design workshops.
Focus group discussion that will occur during training webinars. <i>RQ 3</i>	Case study participants and selected participants from Project LOCAL for a total of 18-20 participants	Inductive thematic analysis and content analysis of verbal and chat discussion during webinars	Understanding of comprehension among library staff with outcomes-based assessment, equity-based program development, and comprehension of design methodology to prepare for workshops.
Focus group discussion that will occur during 3-4 value sensitive, participatory design workshops; various artifacts that emerge from the design process. <i>RQ 3</i>	Same participant group from training webinars	Inductive thematic analysis and content analysis of transcripts; visual analysis of artifacts;	Framework for social justice, outcomes-based planning and assessment for outreach programs and services to families and children (ages 0-8) in underserved communities.
Virtual focus groups. <i>RQs 1, 2</i>	State library youth consultants; administrators from participating libraries	Inductive thematic analysis and content analysis of transcripts	Deep understanding, within each participating state, of statewide initiatives, strategic plans, and/or efforts around outreach work to underserved communities with families and children (ages 0-8).

² Inductive Thematic Analysis is a method of analyzing the data through a continuous re-examination of the data to develop a set of common themes across the data set.
³ Content Analysis is a method that involves developing a set of codes based on textual data and then systematically applying those codes to the data.

Recruitment: The four state libraries who are serving as partners on the grant will help to identify one small, one medium, and one large library, across urban, suburban, and rural areas to participate in the study. Once libraries have been identified, researchers will be in touch with staff to identify community partners and family members who would be willing to participate in the case study observations and interviews. Researchers are currently in the process of contacting selected participants from Project LOCAL to determine their interest in and capacity for participating in toolkit development. These states were purposefully chosen based on data from Project LOCAL and on a desire to have geographical representation across the country while maintaining a manageable participant group for the purposes of case studies, training, and design workshops. Within these states, we will be looking for library staff who offer regular outreach programs across a variety of content areas, which allow for sustained interaction and engagement, for families and children ages 0-8 in underserved communities.

Content: *Twelve Embedded, Multi-site Case Studies*—Each case study will be made up of interviews, observations, and surveys with each broad stakeholder group in the community outreach ecology--library staff developing and implementing outreach programs outside the library; community organization staff partnering in the development and implementation of these programs; and families who attend outreach programs out in the community. The intent of the embedded, multi-site case studies is to provide information on the process, content, and audience perception of a variety of outreach programs, developed by or in partnership with a strong presence from the library. We will be able to observe outreach programs in the field and gain a deep understanding of scope and resources of various outreach programs taking place across the country; current practices and gaps around assessment and social justice tenets of equity, empowerment, and engagement in outreach production; and the capabilities of stakeholders to inform outreach programs. Site visits were not a possibility with Project LOCAL due to the limited funds and time frame, so these case studies will offer the opportunity to explore the library outreach ecology in a multifaceted, meaningful way in various communities across the country. Each element of each case study will be examined as individual sources of data and analyzed along with elements from our other case studies, enabling a cross-case analysis.

Training Modules—We will develop and offer a series of three, hour-long online modules, covering outcomes-based assessment, social justice, and value sensitive⁴ and participatory design, to provide necessary background information for the participatory design workshops we will be offering at ALA Annual 2020 to develop the toolkit. These modules will be created by the research team and include online webinars and supplemental resources intended to build community prior to the workshops, enable information sharing, and prepare participants for the design process in which they will be taking part. The modules, including webinars and resources, will be hosted by OCLC as part of their partnership role. Participants from the case studies as well as selected participants from Project LOCAL who have indicated their continuing interest will participate. The modules will provide time for sharing through discussion to facilitate collaborative knowledge building around these complex topics as well as independent work between webinars.

Design Workshops—At ALA Annual 2020, we will hold value sensitive, participatory design workshops where participants will collaborate with the research team on the design of the toolkit. Each workshop will be limited to 5-7 participants to enable deep discussion and engagement with the design process. While participants will only be expected to attend the workshop once, we will offer it at multiple times to accommodate their schedules and achieve the smaller workshop size. Because many library staff cannot afford to attend ALA Annual, travel funds will be provided for each participant from the grant funds. By including a variety of design techniques and methods, these workshops will surface design challenges around outcomes-based planning and assessment and social justice aspects of outreach efforts, enabling participants to create solutions to some of those challenges. This process will also inform the development of a toolkit that addresses these challenges and is flexible for different sized and resourced libraries to use in their own outreach work. The toolkit will also emphasize the social justice aspects of distribution, participation, and recognition as part of the outreach production process.

Focus Groups—To supplement and extend the case study data, we will conduct focus groups with both youth services consultants at the four state libraries (WA, SC, OH, and CO) and administrators at participating libraries to understand statewide approaches and missions regarding outreach and assessment, as well as any current and ongoing social justice-related initiatives.

Analysis and Preparation for Phase 2: Data from Phase 1 will be analyzed using inductive and thematic analysis to surface

⁴ Value sensitive design (Friedman, Kahn, Borning, 2002) is a methodology that considers stakeholder values and principles when developing and designing technology. In this study we will be guided by this values-forward approach when designing the assessment toolkit.

relevant themes and concepts that will be instructive in the testing and refinement activities in Phase 2. Design requires a specific contextual understanding of the problem space, which the case studies will provide, as well as ideation and iteration, which will occur during the workshops. Similarly, designers need to name and frame the problem space to understand what language is being used and what is needed in terms of design solutions. This will be facilitated by the training webinars that offer common background knowledge and opportunities for discussion and co-creation of knowledge.

PHASE 2: Testing and Refinement (January 1, 2021-August 31, 2022)

Data Collection Method/RQ	Participants	Analysis	Anticipated Findings
Series of independent user testing periods followed by virtual focus group webinars. <i>RQ 4</i>	Phase 1 participants	Inductive thematic analysis and content analysis of transcripts	Uses for the toolkit within current, ongoing outreach programs; benefits and challenges of using the toolkit in the field; how librarians are gathering community data and assessing their programs using the toolkit; how to refine the toolkit for final rollout.
Follow-up focus groups, interviews, and site visits. <i>RQ 4 & Overarching Research Question</i>	Selected participants from phase 1, including library staff and administrators, community partners, and families	Inductive thematic analysis and content analysis of transcripts	Understand the perceptions and experiences of community partners and families with the libraries’ efforts to increase equity, engagement, and empowerment through the development, delivery and assessment of programs and services using the social justice, outcomes-based toolkit.

Content: User Testing—Following the participatory design workshops and toolkit development, we will roll out an initial version of the toolkit. We will then ask participants to test the toolkit with their outreach programs across multiple cycles of user testing. Our intent is that the cycles will include several kinds of programs with a variety of communities so that we have a broad array of data with which to improve the toolkit during this iterative and reflective process. We will invite participants to gather in regular, virtual focus groups to share their experiences using the toolkit in their outreach production process and collaborate on refining the toolkit. These focus groups will be hosted by OCLC and led by the research team. We hope to determine the challenges and opportunities around using the toolkit to develop and assess social justice, outcomes-based outreach programs for families and children in underserved communities by leveraging the distributed expertise of participants. To understand the impact of the toolkit on perceptions of the community partners and families we will ask the librarians to engage in community data gathering (scaffolded by the toolkit itself), conduct post-program surveys and interviews, and then come to these webinars ready to share this valuable information. In this way, the voices of community partners and families will be woven throughout the study. Moreover, librarians will be empowered to gather data in an effective way, implement the findings from that data in outcomes-based program planning and assessment, and then share out the results of that assessment. A session will also be held at ALA Midwinter 2021 to offer additional library staff, administrators, and other stakeholders the opportunity to give feedback on the toolkit.

Follow-up data collection—We plan to conduct additional interviews, focus groups, and site visits to gain an understanding of the perceptions and experiences of community partners and families with the libraries’ efforts to increase equity, engagement, and empowerment through the development, delivery and assessment of programs and services using the social justice, outcomes-based toolkit. In addition to answering research question 4, the data from these research activities will provide insight into our overarching research question.

Preparation for Toolkit Rollout: The data from Phase 2 will inform the toolkit refinement process as we work toward rolling out the final version of the toolkit for wide release at ALA Annual 2022. Additional information on this rollout can be found in Section 4, Broad Impact, below.

Personnel: The Project VOICE team includes specific talents: 1) **Kathleen Campana, Project PI**, is an assistant professor at Kent State University. Campana brings considerable library research experience to this study. Her dissertation studied storytime as an information environment for young children and the learning that occurs for children when interacting in the information environment. She is currently exploring how robust library-preschool partnerships can support family engagement, especially for preschools who serve children and families in underserved communities. In

addition, Campana assisted with the design, management, and research of Project VIEWS2—an IMLS grant which explored the early literacy impact of library storytimes. 2) **Michelle H. Martin, UW PI**, holds the Beverly Cleary Endowed Professorship in Children and Youth Services at the University of Washington (UW) Information School (iSchool). Dr. Martin is the creator of an outreach, literacy-based program called Read-a-Rama (Copeland & Martin, 2016) that uses children's books as the springboard for all programming. The hands-on, interactive activities that Read-a-Rama® offers build literacy skills and a love of learning in children. Her recent research on the impact of this program with families positions her to take a unique view on the data that surfaces through this study. 3) **J. Elizabeth Mills, Researcher**, Doctoral Candidate at the UW iSchool, also brings considerable research experience from Project VIEWS2. Mills' dissertation looks at how librarians are using the design process of reflection in their planning, delivery, and assessment of public library storytimes. Campana, Martin, and Mills collaborated on Project LOCAL to conduct focus groups, interviews, and a nationwide survey seeking to understand the current landscape of outreach in public libraries. In Project LOCAL, Campana, Martin, and Mills collaborated with state libraries for survey dissemination and in an advisory capacity and relied on existing partnerships with library staff and administrators for recruitment and data collection locations. We plan to use these existing relationships in this proposed research to extend and deepen the impact for the field. 4) **Ricardo Gomez, UW Co-PI**, is an associate professor at the UW iSchool and brings considerable experience in conducting participatory design research with underserved communities. He seeks creative ways to communicate complex ideas and research results in everyday language. He has worked with private, public, and non-profit sectors around the world, with a particular focus on Latin America and the Caribbean. 5) **Jacqueline Kociubuk, Project Organizer**, MLIS/MEd Candidate at KSU School of Information, brings knowledge and experience with social justice efforts in public library children's services. In addition, her work on Project LOCAL, as a graduate assistant, provides her with a deep understanding of outreach as a method for reaching children and families in underserved communities.

The **Strategic Advisory Board** for this study (see Supportingdoc4 for members) includes a variety of individuals representing both library and community organizations. Their role will be to provide feedback and guidance on research design and protocols and review all documents generated by the grant for relevance, cultural sensitivity, and validity. We will also be engaging with our **State Library Partner Board** (see Supportingdoc4 for members) on a more regular basis to benefit from their in-depth expertise.

Budget: We are requesting funds for: (1) salary and fringe benefits support for co-PIs during the summer; (2) course buyouts for Project PI; (3) support for graduate assistant and part-time project organizer; (4) travel support for research team and participants; (5) materials and supplies; (6) transcription and other contractual services; and (7) external consultants. The total amount requested for this project is \$431,533. Through a subcontract, UW will be requesting \$169,201. See Budget and Budget Justification for further details.

3. DIVERSITY PLAN

Plan for Diversity: This project is committed to diversity in all aspects, which can be seen through our broad goal of helping libraries become more effective in their work with young children and families from underserved communities who face numerous barriers to coming into the library. Our social justice lens of promoting equity, engagement, and empowerment for these families underscores the crucial importance of diversity in this research and ultimately in how libraries support families in underserved communities. Since this project will target small, medium, and large libraries in urban, suburban, and rural areas of the South, the Midwest, the Pacific Northwest and the Mountain Region, VOICE will serve a socioeconomic, racial, ethnic, and regional cross-section of the US. In addition, we plan to be intentional in our selection of communities and libraries that we approach for participation from each state as well as from the Project LOCAL study, ideally creating a participant group that represents a diversity of libraries, underserved groups, and broader communities. We also plan to incorporate additional diverse voices in terms of libraries and communities through the toolkit feedback session at ALA Midwinter, which will be open to all. Our commitment to diversity will also be achieved through feedback from our Strategic Advisory Board which is composed of an ethnically diverse group of experts from a variety of fields--both practitioners and scholars--who have broad experience with addressing diversity, equity and inclusion in libraries. Finally, our research team is racially and ethnically diverse and international, including a Columbian, an African American, a biracial Asian-Caucasian, and a Caucasian, which adds a depth of perspectives and life experiences to the project, enabling thoughtful data collection and analysis.

4. BROAD IMPACT

To support widespread adoption and to build national awareness of the research and our findings, we have outlined our dissemination plan around two goals: rollout of the toolkit in the field and broader dissemination of the research. **Rollout of the toolkit** will be done through a variety of venues: ALA Annual 2022, state library conferences, and other continuing education venues (i.e., webinars and workshops), where we can specifically share the toolkit and the curriculum around social justice outreach work, value sensitive participatory design, and outcomes-based assessment with practitioners.

Broader dissemination of the research and findings will be done in an ongoing manner through national conferences, such as ALA, PLA, NAEYC, ALSC Institute, ARSL and state library conferences, and both academic and practitioner journals, such as *Library Quarterly*, *Journal of Library and Information Science*, *Public Library Quarterly*, *Children and Libraries*, and more. This research team has a strong, well-established record of practitioner-focused dissemination (see Supportingdoc6) and will be prioritizing this audience to ensure targeted program design in libraries, to support critical information sharing, and to solidify the role of the library as a catalyst in communities of families with young children.

In addition, the research team on this project all teach in MLIS programs in which we are training the next generation of LIS professionals. Each of us plans to share the toolkit and disseminate the results of this research through our classes and, when possible, to share preliminary findings to help students begin to develop their own understanding of the importance of social justice-based library outreach. Finally, to support widespread adoption and ensure sustainability we will continue to incorporate the research into coursework after the grant period has concluded. We also plan to pursue working with library organizations (i.e. OCLC), state libraries, and associations to provide professional development opportunities for library staff around the research and the toolkit. The research team will also create a project website to house information about the study, the toolkit, and any updates. We will ask participants to share the toolkit within their own communities of practice. A Facebook page will be created to share information about the project. Project supporters and state librarians will publicize news of the project as well as links to the project's website and Facebook page. A final report will be posted online.

Sustainability and adaptability of the toolkit: This research will result in a social-justice focused, outcomes-based toolkit that will enable library staff more effectively support young children and their families from underserved communities through outreach programs and services that place an emphasis on equity, engagement, and empowerment. For the toolkit and the research to be widely adopted by the field it must be flexible and adaptable for all libraries and communities. Through Project LOCAL we gained insight into the diverse nature of the underserved communities that libraries are working with, the needs, aspirations, and capabilities of those communities, and the variability of library resources. Because of this variety, we envision a toolkit that is flexible and adaptable to libraries and communities across the nation. This flexibility will be accomplished by engaging library staff from across the country who work in small, medium and large libraries and in rural, urban and suburban areas, to help shape, design, and refine the toolkit within the context of different outreach programs that serve a variety of underserved communities. The diverse nature of these contributions will ensure adaptability by different communities and institutions. Finally, for the curriculum around social justice outreach work, value sensitive participatory design, and outcomes-based assessment, we will ensure its flexibility and adaptability by gathering feedback and updating it throughout the project in an iterative way.

Evaluation of the toolkit and the research: We plan to source the evaluation for our project from three different sources: the participants, the advisory board, and an external evaluator, who will be hired after the project is funded.

1. The participants will contribute to our evaluation through their feedback at two crucial points in our study: during the development and refinement of the toolkit and other products in phase 1 and through the testing periods and follow-up data collection in Phase 2.
2. The advisory board will contribute to our evaluation by providing feedback on all research activities throughout the project at our quarterly meetings and through a final feedback session at the end.
3. An external evaluator will contribute to our evaluation by providing an evaluation of the toolkit. The evaluation of the toolkit will be done at two points in the project: after the initial rollout at the beginning of Phase 2 and at the end of the project.

All of these data sources will be pulled together into a final report that provides an evaluation of our research activities and of the social justice, outcomes-based planning and assessment toolkit.

Project VOICE: Value sensitive design of Outcomes Informing Community Engagement
Schedule of Completion

Major Activity	Start	Finish
Manage all grant activities and personnel; meet with staff; share docs & schedules on secure website	Ongoing	Ongoing
Communicate with intended audiences using various means	Ongoing	Ongoing
Planning for case studies	September 2019	October 2019
Case studies of 12 libraries across four states	October 2019	November 2019
Plan online trainings with OCLC	November 2019	December 2019
Offer online trainings with OCLC	January 2020	March 2020
Prepare for value sensitive, participatory design workshops	April 2020	May 2020
Offer value sensitive, participatory design workshops	June 2020	June 2020
Focus groups with state library youth consultants/administrators	July 2020	July 2020
Toolkit development	August 2020	December 2020
Feedback session at ALA Midwinter	January 2021	January 2021
Toolkit refinement	January 2021	February 2021
Toolkit initial rollout	March 2021	March 2021
Plan user testing and focus group webinars with OCLC	March 2021	March 2021
User testing and focus group webinars with OCLC	April 2021	November 2021
Data analysis from user testing and webinars	December 2021	February 2022
Follow-up data collection, additional user testing, and data analysis	January 2022	March 2022
Finalize toolkit	April 2022	May 2022

Official toolkit rollout	June 2022	June 2022
Finalize grant activities	July 2022	August 2022



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 toolkit, training curriculum, any additional research products, and any website content will be freely available to access and download. This work will be licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

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.

The toolkit, training curriculum, any additional research products, and any website content will be freely available to access and download.

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 do not anticipate that the content created will involve privacy concerns, require obtaining permissions or rights, or raise cultural sensitivities. All of our data will be scrubbed of identifiable information to protect identity of the organizations and individuals involved.

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.

The project will result in a toolkit and training curriculum for library staff. In addition, a website will be created to store the toolkit and training curriculum and to enable public access to the project. The website will be hosted on Kent State University servers and will be created using a standard development platform, such as drupal or Wordpress. The website will include: 1) the toolkit; 2) training curriculum; 3) information about the project; 4) effective practices that libraries can use to engage with families from underserved communities who are not currently using the library; 5) a variety of resources for community engagement outside of the public library in order to support practitioners in their role; and 6) publications that come out of the project.

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 hardware and software necessary for creation of this content will be provided by grant funds, Kent State University (KSU), University of Washington (UW) or the researchers. The PI and other researchers will be using personal workstations or those provided by their universities and personal or grant-funded audio and video recorders. Software for research activities, toolkit production, data production, and analysis will be provided by the researchers and the universities. Researchers will use an external transcription service. Data analysis software (e.g., PASW Statistics, formerly SPSS, and ATLAS.ti) will be used to analyze the data from the case studies, interviews and focus groups. The project website and accompanying technical documentation will be produced by the research team. The platform for the training modules and the user testing focus groups will be provided by OCLC's Webjunction.

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).

File formats associated with this project will include: pdf, docx, pptx, mov, mp3, mp4, jpeg, xlsx, as well as data files and website files. Platform hosting for training modules and testing webinars will be provided by OCLC and website support and guidance will be provided by Kent State University's IT Services Team to ensure quality standards are appropriate and that longevity and stability of file types are maximized.

B. Workflow and Asset Maintenance/Preservation

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

The toolkit will undergo several rounds of user testing and the training curriculum will be revised based on feedback from the participants. In addition, the research team will review all data and project products prior to release. The research team will also test and monitor the website and address any issues that arise.

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).

During the grant period all digital products and data will be stored on secure servers at KSU and UW's iSchool. The website will also be hosted on KSU servers. After the grant period ends, the website will continue to be hosted on the KSU servers. The video and audio files will be moved to a password protected, encrypted, external hard drive to be held by the research team. Other research and digital data will be stored in a digital repository that is part of the University of Washington's Library System.

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).

Metadata in the form of topics and subject tags, suggested and tested by our library partners, will be used to provide organization and access to the website. A site map and menu on the project website will aid in navigating site content.

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

Metadata used on the website will be periodically reviewed by the research team, including at least annually after the grant period of performance, and will update terms and the metadata schema as needed to ensure the site continues to be useful and navigable.

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).

To support widespread discovery of the site, we will integrate search engine optimization principles into the design.

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).

Researchers will create a project website that will be freely available via standard web browsers. The toolkit and the training curriculum will be freely available on the website. Content will be distributed throughout the site using tabs and menus. This website will be maintained on KSU servers and updated as needed by the researchers.

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.

Members of this team have created the following websites based on IMLS-funded research studies:
Project VIEWS2: <https://views2.ischool.uw.edu>
Project LOCAL: <https://projectlocal.ischool.uw.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.

Not applicable for this project

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.

Not applicable for this project

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.

Not applicable for this project

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

Not applicable for this project

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

Not applicable for this project

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

Not applicable for this project

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

Not applicable for this project

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.

Not applicable for this project

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

Not applicable for this project

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

Name of publicly accessible source code repository:

Not applicable for this project

URL:

Not applicable for this project

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.

We will collect data through case studies, training modules, toolkit design workshops, toolkit testing phases, and through interviews and focus groups throughout the study. This research will collect qualitative data in the form of 1) audio and video files and transcripts collected during case studies, interviews, and focus groups with library staff, administrators, state library staff, families, and community partners; and 2) artifacts (documents collected during case studies and design workshops). The data will be used in presentations and publications about the research. To facilitate openness and transparency with our participants, we will ask their permission to share data among participants.

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?

Once the project has been funded we will seek approval from the Kent State University's Institutional Review Board. The University of Washington's IRB will rely on KSU's IRB.

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).

In the case studies, focus groups and interviews we may collect identifiable information from library staff, administrators, state library staff, and community partners. All identifiable information will be scrubbed and removed from the dataset before data analysis begins and as a condition of our IRB protocol.

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.

For all of the research, we will collect signed paper consent forms which will be stored in a locked file cabinet in the locked office of the PI. We will assign each participant a unique identifier to be used in the dataset in order to maintain their confidentiality. A password-protected spreadsheet kept on a secure server at the iSchool will hold the links between the unique identifier and the individual.

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).

We will videotape any observations of programs. These instances will be transcribed and stored in MS Word documents. Any interviews done with library staff, administrators, families, and community partners will be audio-recorded, transcribed, and stored in MS Word documents. All focus groups will be video-recorded and transcribed and stored in MS Word documents. Any artifacts will have identifying information removed and will be digitized and stored as images or PDFs.

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?

We will create codebooks and documentation of thematic analyses, using MS Office tools, for use with the data. This documentation will be stored along with the data. The dataset will be assigned a unique identifier that will also be included in the documentation in order to create a permanent association between the two.

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

We will archive the data in the ResearchWorks openaccess repository at the University of Washington. Data will be disseminated after the completion of the project through conferences and publications. Slide decks, publications, and other grant products will be shared through the project website and other relevant avenues.

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

Name of repository:

ResearchWorks Service, University of Washington

URL:

<http://digital.lib.washington.edu/index.html>

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

The research team will review the data management plan on a regular basis. The plan will be implemented and monitored by the research team.