

Enriching Library Family Programming Using the Smithsonian Institution's Talk with Me Toolkits

PROJECT OVERVIEW

[Family Place Libraries™](#) (FPL), an initiative of the Middle Country Library Foundation, will lead this IMLS Implementation Project in partnership with the [Smithsonian Office of Educational Technology \(OET\)](#) and [Goodling Institute for Research in Family Literacy](#) at The Pennsylvania State University. We will adapt and evaluate the Smithsonian OET's free, online [Talk with Me Toolkits](#) (TMTs) for use in libraries' family literacy and engagement efforts. Family Place Libraries™ is a comprehensive, library-based, early childhood family support service model that has been successfully implemented in more than 500 libraries in 32 states. The two-year proposed project (8/1/2022–7/31/2024; budget of \$249,999) includes: (1) adaptation of six TMTs to complement children's books in public libraries and for use in family programming, (2) pilot-tested TMTs in four geographically diverse libraries with 80 underserved families, (3) increased capacity for other librarians to use TMTs and develop digital collections based on Family Place Libraries' trainings (about 2,000 librarians), (4) increased parent-child literacy interactions and parents'¹ comfort with digital technology, and (5) expanded digital TMTs with training for implementation for librarians and museum educators across the United States.

PROJECT JUSTIFICATION

IMLS Goal and Objective

This project addresses **Goal 1** (build the workforce and institutional capacity for managing the national information infrastructure and serving the information and education needs of the public) and **Objective 1.3** (create opportunities for continuous learning for families of diverse cultural and socioeconomic backgrounds). Specifically, this project meets libraries' need to offer high-quality, digital educational resources for diverse families and parents' need to access literacy resources and obtain guidance for using them to foster children's learning. Libraries' and parents' needs were identified through discussions among Family Place Libraries, Public Library Association (PLA), Smithsonian, and Goodling Institute personnel; reviews of empirical research and documents describing the need for family engagement through libraries; and our decades of collective experience working with families in library, museum, and community settings to nurture intergenerational learning and literacy.

Need for Project and Relevant Research

Parents play a key role in nurturing their children's development and preparation for school (Dearing et al., 2006; Hayakawa et al., 2013; Hutton et al., 2015; Paratore, 2001), and increasingly, digital technologies mediate parent-child communication and literacy interactions (Lynch & Prins, 2022; Marsh et al., 2017; Rideout, 2017). However, access to digital technologies, resources, and high-quality learning materials is unequally distributed by income, race/ethnicity, education, and geography (Atske & Perrin, 2021; Perrin & Atske, 2021; Swenson & Ghertner, 2020; Vogels, 2021a, 2021b). Moreover, low-income and underserved families in particular can benefit from guidance on how to use online resources and digital technologies to promote learning. Families face four types of barriers to digital access: motivational, material, skills, and usage (Van Dijk, 2006). Libraries, including our pilot sites, already promote *material* access by providing free resources such as internet access, broadband hotspots, and computers (Clark & Perry, 2015; Strover, 2019), resources that are crucial in low-income and rural communities (Petri, 2017; Strover et al., 2020). However, if libraries provide only material access, they risk exacerbating inequities between higher- and lower-income families (Neuman & Celano, 2006; Neuman & Celano, 2012) because privileged families can leverage their cultural capital to accrue more advantages from the same resources (Van Dijk, 2006). Van Dijk (2006) suggests that to realize digital technologies' educational potential, families also need interest, motivation, and confidence (*motivational* access); digital literacy *skills* (including operational and critical/strategic skills); and meaningful opportunities to use technologies, especially for knowledge creation and critical thinking (*usage* access). Thus, the "new" digital divide stems from what people *do* with the technologies and digital materials at their disposal (Dolan, 2016; Van Dijk, 2006). Our project addresses the divide between the digital "cans" and the "cannots" (Dolan, 2016) by creating materials that support families' ability to use technology to produce meaningful knowledge, not just to passively consume information.

Our project builds on research underscoring that underserved parents need structured resources that help them gain confidence and skills in using digital technologies in ways that harness the tools' educational potential. For example, a study of educational technology programs at Philadelphia libraries in a wealthy and a low-income neighborhood revealed marked differences in parents' behavior (amount and types of adult direction and attention) and children's language exposure (Neuman & Celano, 2012). This finding indicates that lower-income parents may not see themselves as the main

¹ In this proposal, we use "parents" as an umbrella term that includes any adult caregiver (grandparent, aunt/uncle, neighbor, etc.).

mediators of children’s digital literacy learning (Bakó & Tóké, 2018; Plowman et al., 2008). Similarly, an unpublished Smithsonian study of its Learning Lab (digitized museum collections) as a family learning platform showed that low-income parents of young children tended to see the technology, rather than themselves, as the teacher. Moreover, parents may feel torn about restricting children’s access to digital technologies versus using them as educational tools (Chaudron et al., 2015; Livingstone et al., 2019). Since children mainly use digital devices for entertainment (Bakó & Tóké, 2018; Chaudron et al., 2015; Neumann & Neumann, 2017; Perry & Moses, 2007), children need parental guidance to use these tools to become knowledge producers rather than passive consumers (Verenikina & Kervin, 2011). Thus, this project will adapt TMTs as creative, educational, digital resources that families use together through libraries, thereby enhancing access to digital learning technologies to the partnering libraries and beyond.

This project also responds to calls for libraries to bolster family engagement (Celano & Neuman, 2015; Institute of Museum & Library Services, 2013; Lopez et al., 2016; Lopez et al., 2017; Office of Child Care, 2012), particularly for underserved families with young children. The project will provide libraries with new, engaging digital resources (with accompanying intergenerational activities) to use in family programming; enable libraries to enhance families’ abilities to navigate and use varied digital tools for children’s learning and education (Neumann & Neumann, 2017); and support parents’ and children’s digital skill development. Despite libraries’ practice of delivering early literacy programs, educational and information sciences researchers still know little about how parents use such programs to support children’s literacy development (Graham & Gagnon, 2013) or their own digital learning as adults. Accordingly, this project creates a library-museum-university partnership to gather pilot data on selected child and parent outcomes. Through this implementation project, Smithsonian’s TMTs will provide librarians with a tool to foster family engagement and digital learning while also strengthening libraries’ capacity to develop their own digital collections to meet community needs. Intended for families with children aged 3 to 8, the TMTs support parent-child talk and learning with digital, thematic collections of museum artifacts, captivating videos, and real-world photographs representative of diverse cultures. Each TMT includes recommended books and hands-on activities. The Smithsonian Learning Lab offers educators and the public access to Smithsonian digital resources via curated “collections,” and the Lab designed the TMTs for parents and children to use together. TMT collections are multimodal (still images, videos, music, print, etc.) and culturally affirming. They also include offline learning activities (e.g., making art, reading picture books, physical movement), which helps alleviate concerns about sedentary screen time.

Libraries are ideal sites to engage families and promote intergenerational learning through TMTs. However, TMTs need to be adapted for use in libraries, and training and support materials for librarians must be developed. Moreover, a prior focus of TMTs was school-based learning; data about the use of TMTs in libraries has not been collected, nor has data about their impact on underserved families. Therefore, we want to learn if libraries and diverse populations can access and use multimodal learning collections, such as TMTs, and what modifications are needed for their effective use.

Libraries as Partners

Family Place Libraries is the perfect partner to support TMTs’ adaptation for use in libraries because FPLs are a “center for early childhood information, parent education, early literacy, socialization and family support” for other librarians across the United States. As learning hubs, libraries allow children and parents—especially in lower-income families—to play (Celano & Neuman, 2015) and explore digital media (Lopez et al., 2016), which strengthens parents’ ability to support children’s language and literacy development. Further, libraries may be the only place where low-income families can access educational information and borrow books (IMLS, 2013). Although TMTs are free and online, adults who are less familiar with technology would benefit from additional guidance and support in using them. Libraries can use the TMTs to expose families to the Smithsonian’s vast digitized collections (paintings, photographs, videos, audio recordings, artifacts, etc.), thus helping to overcome underserved families’ physical and cultural exclusion from museums (Dawson, 2014; Kinsley, 2016). Parents face a bewildering array of apps, e-books, and other digital technologies for children, many with dubious educational value. As such, librarians can use the adapted TMTs to help families engage in digital literacy practices that support children’s learning and development (Neumann & Neumann, 2017) and align with the National Association for the Education of Young Children’s (2012) media recommendations (i.e., the TMTs are active and hands-on rather than passive, give children control, and provide supports for learners). In sum, libraries are ideally positioned to partner with families (1) to build parents’ skills in using and interpreting multimodal media (e.g., digital images, videos, scanned books, websites, blogs, podcasts); (2) to help parents and caregivers harness digital tools for children’s learning and education rather than entertainment (Neumann & Neumann, 2017); and (3) to experiment with new ways to support lifelong and intergenerational learning (Ballew, 2014). Libraries can also partner with museums to provide novel intergenerational learning opportunities (IMLS, 2013) for children and parents.

Target Groups

The target groups are (a) the four partnering libraries and (b) the families (parents and their children aged 3 to 8 served by those libraries) who have limited access to educational and digital resources and cultural institutions such as museums. In this project, underserved families include those with lower incomes and education levels (no college degree), immigrants, and people of color. This project will include 80 or more families at four libraries; at least 50% of the families will meet one or more of the four diversity criteria (see Diversity Plan).

Beneficiaries

The ultimate beneficiaries of this project are libraries (beyond our four pilot test sites) that work with underserved families with young children. The TMTs will be of tremendous value to Family Place Libraries' vast networks of librarians that serve low-income families who would benefit from access to high-quality, authentic, digital materials curated by the Smithsonian Institution. Other libraries will benefit from the adapted TMTs because they can be used as support materials for family engagement and family literacy efforts. The adapted TMTs will be especially useful for libraries in communities that are racially/ethnically diverse, geographically isolated, or have high levels of poverty and low levels of educational attainment. The Smithsonian OET, Family Place Libraries, and Goodling Institute will host the revised materials online for free for families and libraries.

PROJECT WORK PLAN

Project Goals

The project work plan has four goals: (1) to adapt, pilot, and refine TMTs in four geographically diverse FPLs; (2) to partner with library staff to effectively implement TMTs and develop new collections; (3) to assess TMTs' effectiveness in strengthening parent-child talk and literacy interactions and increasing parents' comfort with digital technology; and (4) to disseminate TMT collections and implementation guide widely in libraries throughout the country.

Description of Talk with Me Toolkits

The Smithsonian OET has 19 free TMT digital collections to support parent-child interactions. Collection topics include Nature, Air and Space, Music, Myself and My World, and Art. Each collection covers topics in a colorful, easy-to-understand format with videos, real-world photographs, artworks, hands-on learning activities, and recommended children's books to expand learning. Several collections have [Project Zero](#) thinking routines (e.g., [See, Think, Wonder](#)) to prompt conversation and discussion. A collection from each topic will be pilot-tested, with two collections from Art. The collections include: [Who lives in the dirt? \(Nature\)](#); [Can it fly? \(Air and Space\)](#); [Travel this land \(Music\)](#); [My beautiful skin \(Myself and My World\)](#); [Colors, shapes, and lines \(Art\)](#); and [Light and shadow \(Art\)](#). Generally, the TMTs are not text-heavy, but the six collections were chosen because they use simple language on the slides and they are relevant to diverse cultures and socioeconomic backgrounds. Text includes brief information about the image or artifact, short words or phrases (e.g., "look closely"), and prompts and brief instructions for extension activities (e.g., "Look at the photos and videos together. What animals live in the dirt?"). As such, TMTs are well suited for families who are learning English. An account is not needed to access the TMTs, and they can be used at home or elsewhere with any digital device.

Description of Family Place Libraries

Family Place Libraries is a national program established by the Middle Country Public Library (MCPL) in Centereach, NY in 1997. FPL is a center for early childhood information, parent education, early literacy, socialization, and family support. Expanding the traditional role of children's services, FPL builds on the knowledge that good health, early learning, parental involvement, and supportive communities play a critical role in young children's growth and development. The goal of FPL is to develop and establish a family-friendly environment by transforming libraries into community centers for literacy, early childhood development, parent education and engagement, family support, and community information. FPL also collaborates with other family-serving organizations to provide resources, programming, and places where families of all cultures, and income and education levels can learn.

The following key features of the FPL model will support the use of TMTs:

- **Staff who are trained in the principles of early childhood development, parent support, and emergent literacy**, who organize partnerships and coalitions with community agencies and reach out to families, especially new and underserved families, and who participate in professional development activities that address local families' needs.
- **The Parent/Child Workshop**, a regularly scheduled, 5-week series for parents and young children in an early childhood setting where they can play with developmentally appropriate materials, meet other parents and caregivers, and learn about library and community resources. The program fosters parents' understanding of their role as children's first teachers and brings them into contact with other parents and the resource personnel who answer questions and offer informal advice.

- A **specially designed space** in the library for young children, parents and caregivers, equipped with educational toys, audiovisual materials, electronic resources (including digital devices), and books.

Description of the Goodling Institute for Research in Family Literacy, Penn State

The Goodling Institute provides national leadership that promotes the value of family literacy and supports program improvement through research and its application to practice and professional development. The Institute’s work also builds on current scholarship in family and digital literacy, parent involvement, and social justice and racial equity. Institute staff have conducted national, state, and local evaluations for family literacy and worked extensively with family literacy programs, including those in libraries.

Project Timeframe, Activities, and Responsibilities

The sequence of activities is organized by an iterative design-based research methodology (DBR, Sandoval & Bell, 2004), a research and evaluation approach that simultaneously advances practice and theory through empirical evaluation of learning outcomes aligned to the proposed TMT intervention. DBR requires close-knit educational partnerships to develop interventions that suit the needs of partners, including key findings from prior studies and theoretical perspectives. The project goals will be completed in three phases: *Planning*, *Testing*, and *Disseminating*. The Project Director will have **regular virtual meetings** with project partners during all phases to discuss completion of tasks and track progress of achieving intended results.

Timeframe of Activities	
<i>Phase I: Planning</i>	
8/1/2022	Plan, adapt TMT collections, develop data collection instruments, provide training for librarians
<i>Phase II: Testing</i>	
1/1/2023	Round 1: TMT testing and data collection with DBR approach
5/1/2023	Analyze round 1 data and modify TMT collections
9/1/2023	Round 2: TMT testing and data collection with DBR approach
1/1/2024	Analyze round 2 data and modify TMT collections
<i>Phase III: Developing Deliverables and Disseminating Results</i>	
5/1/2024	Develop and disseminate deliverables, conduct outreach on collections, and develop a sustainability plan.
7/1/2024	Initiate implementation of sustainability plan

Phase I: Planning (8/1/2022- 12/31/2022).

The planning phase will include the following activities:

- The first modification of six purposefully selected TMTs will be completed by Smithsonian OET staff to ensure the TMTs have a consistent structure that (1) can be used in libraries, (2) encourages discussion between parents and children, and (3) is easily understood. The TMT collections will be modified so that the Project Zero thinking routine questions and approach are consistent. For example, each TMT collection needs to have the same number of slides and questions per slide, a similar developmental activity, and a book that aligns with the collection (each family will receive the book as an incentive). If needed, the artifact descriptions, videos, and conversation prompts will be translated into Spanish, which is the primary language of most non-English speakers in the project’s target group. FPL and Goodling Institute will provide input on the modifications as needed.
- **Training materials and a webinar** will be developed and included in a virtual implementation guide to introduce the TMT collections to library staff, share ideas for using collections with families, and support librarians’ creation of new collections for future programming. Family Place Libraries and Goodling Institute will work with Smithsonian OET to inform the training content and develop a survey to evaluate the training. FPL will gather information for participating libraries to develop the training and pilot-testing schedule. OET will host the webinar training about the six TMT collections.
- Goodling Institute will develop **data collection instruments** for pilot-testing by adapting surveys and interview protocols from previous evaluations. The [Adult Child Interaction Reading Inventory \(ACIRI\)](#) will be modified for the observations to determine parent and child attention to the slides and text, as well as behaviors that promote interactions (e.g., pointing to content, soliciting children’s questions, relating books to personal experiences). A team member who speaks Spanish will be available during the observations, if needed.

Phase II: Testing (1/1/2023-4/30/2024)

Following DBR, we will implement the first iteration of the TMTs, analyze how they were implemented, and use this information to guide further TMT adaptations.

- Pilot-testing will occur in four geographically diverse Family Place Libraries' sites that serve lower-income, underserved families, including FPL's home site, Middle Country Public Library. In addition to considering libraries' capacity to participate in the project, we chose libraries in urban, suburban, and rural communities; communities with a large share of immigrants and/or US-born families of color; and communities with high rates of poverty and low rates of college completion. Additional information about the sites is included in the Diversity Plan.
 - Hillsboro City Library (Hillsboro, TX) is a rural FPL that serves residents who do not have reliable at-home digital services; this project provides an opportunity to bridge the technology literacy gap in their community.
 - Martin Library, York County Public Library (York, PA, a small city in South Central PA) is a veteran FPL of over 20 years. The library has the digital services in place to assist families with using TMTs and welcomes the opportunity to engage families in content and technology that they cannot regularly access.
 - MCPL (Centereach, NY) serves a largely blue-collar, middle- to lower-income Long Island community comprised of three hamlets. As the national model for FPL, MCPL has a proven record of successful family engagement initiatives and through this project will enhance digital literacy programming within the community.
 - Warrensville Heights Branch, Cuyahoga County Public Library (Cleveland, OH area) provides access to a wide array of digital opportunities and sees the TMTs as a valuable tool for underserved families to help engage them in content that will promote parent-child interaction.
- Our DBR evaluation will use **mixed-methods** to test the TMTs with two cohorts for six-week sessions of one hour per week, with an average of 10 families per program. We will recruit approximately 40 families in each cohort, for a total of at least 80 families.
- Families must participate in at least **four of the six sessions** to be included in the data collection and to receive incentives (gift cards for completing surveys and participating in a focus group; see below).
- Libraries will have some **flexibility** in how they implement the sessions. For example, libraries may implement the TMT collections as a stand-alone series or as part of an existing family engagement or literacy program. The training materials will outline parameters and a process for consistency across sites and ideas for recruiting families.
- Libraries will develop **recruitment plans and outreach materials** so that they can enroll at least 10 families for this project. Recruitment methods will include email, flyers, announcements on websites and social media, presentations to partner organizations (e.g., schools, community centers, social service organizations, health clinics), word of mouth, radio advertising, and distributing information at public events. During recruitment, parents will be told about the purpose of the project and the evaluation and incentives to participate. Interested parents will be asked to sign a consent form outlining the evaluation procedures. If interested parents choose not to be a part of the evaluation, they will still be invited to attend each session, but will not receive the incentives.
- Librarians will introduce and run **six sessions** for each cohort. Assistance with scheduling will be in the training materials, but librarians will need to become familiar with TMTs and navigate them efficiently.
- Smithsonian OET will provide **coaching and technical assistance** to library staff throughout the training and pilot-testing. OET will also offer office hours (by Zoom) to support librarians. Follow-up webinars will be scheduled, if needed, to address questions or challenges about the TMTs or the evaluation.
- Data gathered from the **first iteration** will be used by Smithsonian OET to adapt the TMTs, training materials and webinar, and virtual implementation guide, if needed, and to improve implementation of the second iteration. Evaluators will also solicit librarian's and parents' perceptions of the TMTs; their suggestions will be incorporated by OET into the collections for the **second iteration** pilot test. Similarly, after the second iteration pilot test, OET will use data to make final TMT modifications.
 - **Pre-post survey** – Goodling Institute staff will administer a pre-survey immediately before the first session. The pre-survey will determine parents' comfort level with digital devices and their self-assessment of interactions with their children. The post-survey will be administered after the sixth session during a site visit and will be used to determine change in these two areas. Participants will receive incentives (\$20 gift card) for completing both the pre- and post-survey. The pre-post survey will examine the following topics:
 - types and frequency of parents' conversations and interactions with their child,
 - parents' comfort level, types, and frequency of using digital devices on their own and with their children,
 - parents' engagement with activities and reading books with their child.
 - **Parent satisfaction surveys after each session** – After each session ends, a brief survey using a scale from 1 to 5 will be administered to determine parents' satisfaction and comfort level using TMTs. Incentives (\$20 gift cards) will be given to parents for completing surveys. Information will be collected about:

- ease of use (e.g., navigating the slides, question prompts, use and understanding of activities, interest of content, appropriate level for child, clear directions),
- feasibility of use at home,
- engaging to parent and child,
- comfort level with collection and digital tools,
- quality of the collection,
- if the collection fosters conversation with children,
- parents' perceptions of the TMTs,
- if the content is culturally relevant,
- information about the session itself.

Parents' suggestions will be incorporated into TMT revisions for implementation with the **second cohort**.

- **Librarian satisfaction surveys after each session** – A similar survey will be administered to librarians to assess the collection in terms of ease of use, quality of content and activities, programmatic features and supports needed to help staff engage parents and children using TMTs effectively, their perceptions of parent-child engagement and conversations while using TMTs, and suggestions for improvement, including suggestions for additional TMTs. Recommendations from the satisfaction surveys will be included in the final virtual implementation guide and a project report. Librarians' suggestions will be incorporated into the revisions for implementation with the **second cohort**.
- **Focus groups with parents and interviews with librarians** – Before session six, during a site visit, we will hold a focus group with the parents and interview the librarian who implements the TMTs to collect data on their perceptions of the TMT collections, including challenges, successes, and suggestions. Parents will receive gift cards (\$20) for focus group participation. The focus groups and interviews will be audio-recorded and transcribed for analysis.
- A **Zoom focus group with the librarians** from all four sites will be scheduled following the sixth session to obtain collective input from librarians and provide the opportunity to share experiences.
- **Site visits and observations** – A site visit will occur during the first and sixth sessions to administer the pre-post survey, observe sessions, and conduct the parent focus group (after the sixth session) and interview librarians.
 - Observations will be used to determine changes in the quality of the parent-child interactions (e.g., open-ended questions, amount of turn-taking), parent's digital literacy skills (e.g., use of TMT collections) and comfort, and use of the TMT collections. The ACIRI will guide the observations.
- **Remote capacity** – If libraries have to provide services remotely due to COVID-19, the following plan will be implemented: librarians will receive training via Zoom, families will receive materials (e.g., books) by postal mail, and workshops will be held by Zoom. Data collection will occur via Zoom with individuals and groups, as appropriate. All partners have extensive experience working remotely.
- **Data analysis** – Pre-post survey results will be compared and analyzed to determine self-reported changes in parents' interactions with their children and their comfort levels using the collections. The surveys will be administered through Qualtrics and analysis will include frequency counts, *t*-tests, and correlations. Post-session satisfaction surveys from librarians and parents will also be administered through Qualtrics and available on smartphones. Analysis will include frequency counts. Data from focus groups and interviews will be audio-recorded; transcripts of the focus groups will be analyzed using NVivo qualitative data analysis software to determine how comfortable the parents and librarians were in using the TMTs as learning resources and related topics (see above). The ACIRI will be used to code and analyze observation data, with the goal of understanding the learning processes used by families in libraries.

Phase III: Developing Deliverables and Disseminating Results (5/1/2024-7/31/2024)

During this phase we will produce two deliverables: (1) a **project report** with pilot-test results and case studies about how libraries used the TMTs with underserved families and (2) a virtual **implementation guide** with links to the revised TMTs, training materials and webinars, and ideas for incorporating TMTs into library programming. Family Place Libraries, Smithsonian OET, and Goodling Institute will work together to develop a **sustainability plan** that includes expanded TMTs; updates to the training materials and webinar and virtual implementation guide; plans to obtain additional funding for TMT translations, if needed; and ongoing activities for disseminating information about the TMTs (see below for more on project sustainability).

These deliverables will be disseminated to all FPLs and their partners (500 libraries in 32 states), the Public Library Association's (PLA) family engagement initiative and their expansive networks, Smithsonian's Early Learning Collaborative and affiliate museum networks, and Goodling Institute's vast family literacy and engagement networks.

FPL will distribute the report and virtual implementation guide through National Family Place Training Institutes, national network webinars, and the biannual Family Place Symposium held during the PLA conference. Other virtual training webinars will be scheduled for members of PLA, Association for Library Service to Children (ALSC), and state library associations. Deliverables will also be shared through other conferences (e.g., American Library Association (ALA), state and regional library associations, American Alliance of Museums, Family Involvement Conference), research briefs, journals (e.g., ALA Briefs, *Public Library Quarterly*, *Journal of Museum Education*), as well as the websites and networks of Family Place Libraries, Smithsonian OET, Goodling Institute, and advisory committee members. The project outcomes—(1) to adapt, pilot, and refine TMTs in four geographically diverse FPLs; (2) to partner with library staff to effectively implement TMTs and develop new collections, (3) to assess TMTs’ effectiveness in strengthening parent-child talk and literacy interactions and increasing parents’ comfort with digital technology, and (4) to disseminate TMT collections and implementation guide widely in libraries throughout the country—are also aligned with IMLS’s goal and objective to build capacity and infrastructure and create continuous learning opportunities for families, respectively. Ideally, the project is intended as an in-person program, but all project partners have been operating remotely and have the capacity to implement activities using various modalities.

Target Group Perspectives and Contributions

The project plan incorporates the perspectives of two target communities: public libraries and families who use public libraries. The DBR project design provides built-in mechanisms to ensure that librarians’ and families’ perspectives shape the final products. The project work plan (i.e., data collection instruments and pilot-testing activities) is designed to gather external input from librarians and families and to validate that the adapted TMTs are appealing, relevant, accessible, and understandable. We will explicitly seek parents’ and librarians’ suggestions for improving the TMTs. In addition, each iteration of the TMTs, training materials and webinar, and virtual implementation guide for librarians will be reviewed by the advisory committee. In sum, we will triangulate the perspectives of librarians, participating families, and external advisors when we adapt the TMTs.

Project Finances

The \$249,999 budget includes \$75,184 to FPL for salaries/benefits (\$25,824), indirect (\$10,944), FPL library contracts and advisory committee stipends (\$34,000), and conference travel (\$4,416); \$154,615 to Goodling Institute for salaries/benefits (\$69,876), pilot test and conference travel (\$19,144), transcription and dissemination (\$3,920), participant gift cards (\$4,800), and indirect (\$56,875); and \$20,200 to Smithsonian OET for TMT modification, training and materials, and virtual implementation guide development, and conference travel.

Project Personnel

The purposefully chosen team of project partners, staff, and advisory committee will help ensure the project’s success, national impact, and sustainability. Our formidable project team has extensive expertise related to the project goals and results, substantial experience working with the target populations, a prolific record of publications and presentations, and extensive experience managing projects and disseminating results. The **grant administrator and Family Place Libraries project lead is Kristen Todd-Wurm**. She has over 15 years of experience training and working with diverse libraries throughout the nation. As the National Coordinator for FPL, she will work with FPL on project implementation, pilot testing, dissemination, and future trainings and will convene advisory committee meetings. The **project director, Carol Clymer (Goodling Institute Co-Director)** has over 40 years’ experience designing and evaluating adult education and family literacy programs; she is currently the PI on the evaluation of the William Penn Family Literacy Initiative (a \$865,000 project). She will oversee the entire project. **Darren Milligan (Smithsonian OET Acting Director and Learning Lab project lead)** brings over 20 years’ experience creating interactive and participatory digital experiences for teachers, families, and learners. Milligan will lead the development of TMT modifications and training materials and webinar, oversee coaching services, and assist with project deliverables. The **Penn State evaluation team** includes three other people. **Elisabeth McLean (Assistant Teaching Professor, Goodling Institute)** has over 28 years of evaluation and curriculum development experience in family literacy, early childhood education, and parent-child interactions. **Esther Prins (Professor and Goodling Institute Co-Director)** brings expertise in adult education, family literacy, and digital literacies. She has conducted numerous adult and family literacy research studies and co-authored [Teaching and Learning about Family Literacy and Family Literacy Programs](#) (2022). **Heather Toomey Zimmerman (Professor)**, a former museum educator, is a learning scientist and DBR specialist focused on learning in out-of-school settings and investigates how families learn together. This team will develop data collection tools, conduct evaluation activities, and assist with development of the project deliverables. All project staff will participate in advisory committee meetings and disseminate project findings and deliverables.

Our **advisory committee** will add another layer of collaboration and expertise to ensure project success and national impact. The committee includes representatives from local, state, and national stakeholder organizations who will provide

input into each phase of the project and play a strong role in sharing findings and making project results available to their organizations and networks. The committee will be involved in each phase:

- Phase I (Planning): provide input on project design and implementation; review training materials and webinar, data collection instruments, and updated toolkits; and outline suggestions for recruiting and retaining participants.
- Phase II (Testing): provide input on program implementation and TMT modifications.
- Phase III (Developing Deliverables and Disseminating Results): review the final virtual implementation guide, report, and dissemination materials; inform the dissemination and sustainability plans; and help disseminate TMT information and materials through their organizations, networks, conferences, and publications.

The advisory committee will meet about three times per year via Zoom. Smaller group and individual meetings will be scheduled to address specific concerns or questions. Each advisory committee member brings essential knowledge to the project and will provide subject matter expertise and input to the iterative process of the project. PLA will assign one member of their family engagement task force to provide guidance and input to adapt the TMTs for successful library programming. **Christina Taylor (Youth Services Consultant, Texas State Library and Archives Commission)** is a leader in programming for historically underserved populations. She will ensure the TMTs are used in innovative and engaging ways in libraries. **Maureen Leary (Early Learning Programs Manager, National Postal Museum)** has extensive experience developing and evaluating museum resources for young children including expertise designing and implementing virtual Spanish language programming. **Tisha Lewis Ellison (Associate Professor, Dept. of Language and Literacy, The University of Georgia)** brings expertise related to the interactions of family literacy, multimodality, and digital literacy practices among African American and Latinx families. **M. Elena Lopez (Independent Researcher)** has worked extensively on family and community engagement in learning and co-authored [A Librarian's Guide to Engaging Families in Learning](#). Through an application process implemented by our pilot sites, we will select a parent to participate to ensure the TMTs are culturally relevant and focused on the needs and interests of our target group.

DIVERSITY PLAN

Our diversity plan is multi-faceted. The first facet is representation within our target group. At least 50% of the participating families will be from underserved groups: low-income families, families of color, immigrants, or parents without a college degree. The geographically diverse sites include a large city (Cleveland area), a small city (York), a suburb (Centereach), and a rural community (Hillsboro) in the Midwest, Mid-Atlantic, East Coast, and South, respectively. MCPL serves the 60,000 residents of Selden, Centereach, and Lake Grove, NY where 32.5% of adults have a bachelor's degree or higher; 40% of the students in the Middle Country School District are economically disadvantaged and 27% are Latino, 8% Asian/Pacific Islander, 5% Black/African-American, and 3% multi-racial. [Demographic characteristics](#) of the communities served by the other libraries are listed below. The libraries have strong relationships with community partners such as schools, which will help them recruit diverse families for the project.

<i>Site</i>	<i>Population</i>	<i>Educational attainment</i>	<i>Poverty</i>	<i>Immigrants</i>	<i>% people of color (largest racial/ethnic groups)</i>
Hillsboro	8,221	82% no college 12% no high school (HS)	15%	17%	61% (40% Latino, 39% White, 17% Black)
Warrensville Heights	13,789	85% no college 8% no HS	22%	2%	96% (92% Black, 4% White)
York	43,932	88% no college 13% no HS	32%	10%	64% (36% White, 34% Latino, 27% Black)

Family structure is another aspect of diversity. Extended family and fictive kin are important literacy mediators in multicultural families (Curdtt-Christiansen, 2013; Gregory et al., 2004). Black, Asian, and Latino children and children in poverty are also more likely than White, higher-income children to live with grandparents, and 28% of Black children are raised by grandparents (Ellis & Simmons, 2014). Grandparents should be seen as a cultural and family asset (Peterson, 2018). As such, the project will welcome custodial caregivers other than parents.

Families' perceptions of and experiences with using the TMTs will play a central role in adapting the TMTs. Surveys and focus groups will also be used to examine the TMTs' relevance for racially, linguistically, and culturally diverse, low-income families. We will ensure that the TMTs and outreach materials use easily readable text and portray individuals with varied racial/ethnic and socioeconomic backgrounds. We will solicit feedback about the TMTs' content, readability (important for language learners and adults with reading difficulties), usability, appeal, and suitability for family routines, among other topics. TMT family engagement activities will also be held at convenient times for families.

The TMTs will address digital access and literacy. Many families—especially Black families (Perrin & Turner, 2019)—use libraries for internet access. Per [Census data](#), 84-95% of households in the four communities have a computer

at home and 71-91% have broadband. Nationally, 83-85% of Black, White, and Latino families own smartphones (Atske & Perrin, 2021). Thus, we expect that a large proportion of participating families could use the TMTs at home. Families in this project will have greater access to technology through the libraries—not only material, but also motivational, skills, and usage access. Pilot test libraries’ support letters attest that they have ample resources to support digital inclusion.

The research team is formally trained in culturally sensitive ethnographic and community-centered participatory research methods (McLean, Prins, Zimmerman), anti-racist education (Zimmerman), and multicultural education (Clymer, McLean, Prins, Zimmerman); and has published on race/ethnicity, culture, class, rurality, and social justice in [informal community learning](#), [family literacy](#), and [adult education](#). Our team members (all White) have worked in linguistically diverse communities and with vulnerable populations (i.e., incarcerated parents, immigrants, low-income families, adults with reading difficulties) in urban, suburban, and rural settings. Clymer was the Director of Literacy and Workforce Development at El Paso Community College and developed emergent literacy and bilingual training programs for native Spanish speakers. Prins speaks Spanish, which will assist in communicating with Spanish-speaking participants.

The project will strengthen the field’s commitment to diversity, equity, and inclusion because we will employ an asset-based approach that centers participating families’ experiences and insights as valued learning resources, rather than assuming deficits among groups that have historically been excluded from cultural sites such as museums (Stevenson, 2020). The updated TMTs will focus on adopting culturally relevant teaching strategies (Ladson-Billings, 1995), for example, by positioning youth as active knowledge creators and by covering topics pertinent to the lived experiences of immigrants, families of color, and families with limited incomes. Moreover, the findings will inform the development of future TMTs to enhance cultural relevance (e.g., by covering topics relevant to immigrants and families of color and including artifacts from the National Museum of African American History and Culture, National Museum of the American Indian, and the Anacostia Community Museum) and suitability for families with limited economic resources.

Finally, Janks’ (2010) interdependence model of critical literacy suggests that this project can cultivate underserved families’ literacies in four ways. Namely, the project will: (1) provide **access** to dominant literacies that are valued in society (using technology and digital texts, accessing and discussing museum artifacts); (2) value the **diversity** of knowledge, capabilities, and cultural practices that families bring to the project (i.e., families’ “funds of knowledge”; Moll et al., 2005); (3) examine **power** inequities through a critical lens (e.g., by asking whom and what topics the TMTs include or exclude); and (4) involve families in the **design** (adaptation) of TMTs in a culturally relevant way (Ladson-Billings, 1995) for use with other families and libraries.

PROJECT RESULTS

Through our DBR data collection and analysis, this project will address libraries’ need to offer high-quality, digital educational resources for diverse families and parents’ need to access literacy resources and obtain guidance for using them to foster children’s learning. To address these needs, our project aims to achieve these overarching results: (1) adapt six TMTs to complement children’s books in public libraries and for use in family programming, (2) pilot-test TMTs in four geographically diverse libraries with 80 underserved families, (3) increase the capacity of other librarians to use TMTs and develop their own digital collections based on Family Place Libraries’ trainings (about 2,000 librarians), (4) increase the parent-child literacy interactions and parents’ comfort with digital technology, and (5) expand digital TMTs with training for implementation strategies for librarians and museum educators across the United States.

These results will build on librarians’ existing knowledge about helping diverse families and parents’ access and use digital resources with their children and help librarians learn how to build their own TMT collections for use in family programming. The project will also support underserved families to increase their interactions with children and comfort using technology. Specifically, the benefits will include:

- **TMTs for use by librarians, libraries, and other institutions**
 - Librarians will understand the TMTs’ features, relevance, and usefulness for family engagement efforts.
 - Librarians will have access to conversation tools that develop early literacy skills, digital literacy, and parental involvement.
 - Librarians will be able to develop their own digital collections.
 - Librarians will have training materials and webinar and a virtual implementation guide to use for professional development of new staff and librarians who are not familiar with the TMTs.
- **TMTs for use by families**
 - Parents will increase their parent-child talk and interactions, book reading, and engagement activities to promote positive learning outcomes.
 - Parents will increase their comfort level using online, digital technologies.
 - Parents will be able to use the TMTs at home or elsewhere on their mobile devices.

The focus of this project is to test TMTs to ensure that they are adaptable, generalizable, and usable by librarians and family literacy programs in other institutions (e.g., schools, community-based programs, universities). Through our DBR data collection we will assess results through several levels of analysis:

- **TMT as a tool for use by librarians, libraries, and other institutions**
 - Means of 4.0 or higher (on 5-point scale where 5 = highest) on parent satisfaction survey items regarding the TMTs' ease of use, quality of content and activities, and other features over the two pilot-test cohorts, and a statistically significant increase in the mean between TMT iterations 1 and 2.
 - Numerous comments in individual interviews and focus groups indicating a positive assessment of (1) the TMTs' features, relevance, and usefulness for libraries' family engagement efforts, (2) the ability for librarians to develop their own digital collections, and (3) usefulness of the training materials and webinar and virtual implementation guide materials.
- **TMT use by families**
 - How TMT collections influence parent-child talk and interactions:
 - a statistically significant increase (pre- vs. post-surveys) in self-reported measures of parent-child talk and interactions (see Phase II – Testing, above);
 - numerous comments in focus groups indicating that using the TMTs enhanced parent-child talk, interaction, book reading, and related learning outcomes;
 - means of 4.0 or higher on relevant post-session satisfaction survey items (e.g., if TMT fostered conversation) over the two pilot-test cohorts, and a statistically significant increase in the mean between TMT iterations 1 and 2;
 - ACIRI observations demonstrate high-quality parent-child talk and interactions.
 - How using the TMT collections influences parents' comfort level using technology:
 - a statistically significant increase (pre- vs. post-surveys) in digital comfort level;
 - numerous comments in focus groups indicating that parents became more comfortable using the digital TMTs over time;
 - means of 4.0 or higher on relevant parent satisfaction survey items (e.g., comfort level with digital tools);
 - site observations demonstrate parents' increased comfort with technology.
- **Parents' perceptions of the TMTs**
 - Numerous supporting comments in focus groups regarding the TMTs' design features.
 - Means of 4.0 or higher on relevant parent satisfaction survey items about the TMTs' design features (e.g., ease of use, quality) over the two pilot-test cohorts, and a statistically significant increase in the mean between TMT iterations 1 and 2.
 - No statistically significant racial/ethnic or socioeconomic differences in the aforementioned measures (i.e., parents will derive similar benefits from the TMTs regardless of their race/ethnicity, foreign-born status, income/poverty status, or educational attainment).

SUSTAINABILITY ACTIVITIES

At the end of the project, the TMTs and digital collection materials will be widely disseminated for use in libraries and family engagement and literacy programs that serve lower-income and underserved populations who have limited experience with and limited access to high-quality digital learning resources and museum collections. Family Place Libraries will incorporate training for the TMTs into their professional development opportunities throughout their networks. Other librarians across the country will be supported with the training materials and webinar and virtual implementation guide so that they are comfortable using the TMTs with families in any libraries that are committed to family engagement.

The revised TMTs and virtual implementation guide, which will include links to training webinars and materials, will be housed on the Smithsonian OET website. Family Place Libraries and Goodling Institute will cross-link to the Smithsonian OET website so that the TMTs and virtual implementation guide are accessible to their expansive networks. The adapted TMTs will be maintained by Smithsonian OET as a part of their open access resources. Further, the revised TMT website page will include suggestions for connecting the TMTs to books (both print and e-books) and other library resources, and instructions and resources for librarians to modify the TMTs or create their own digital collections for use with families. The updated TMTs will be available on all devices, can be used from home, and can be embedded into a library website. Librarians' ability to develop their own collections will be further supported with online workshops that the project team provides together. The workshops will include hands-on activities to create mini-TMTs. Finally, Family Place Libraries, Smithsonian OET, and Goodling Institute will work together to implement the sustainability plan for the updated TMTs, training materials and webinar, virtual implementation guide, and ongoing dissemination efforts.

Schedule of Completion

YEAR 1	Aug 2022	Sept 2022	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023	April 2023	May 2023	June 2023	July 2023
Meet with advisory committee			X					X				X
Modify six TMT collections for use in libraries and consistency with Project Zero thinking routines including Spanish translation (partners)	X	X	X	X	X							
Develop webinar training and materials to explain the TMT and how to use it in the library (partners)	X	X	X	X	X							
Develop data collection instruments including modifying the ACIRI (PSU)	X	X	X	X	X							
Introduce evaluation protocols and data collection instruments to libraries (PSU)					X	X						
Develop schedules for pilot-test, training, and recruiting (FPL)			X	X	X	X						
Provide coaching and technical assistance about the TMTs to libraries (OET)					X	X	X	X	X	X	X	X
Pilot test first cohort; six weeks over 5 months as determined by the library (FPL)						X	X	X	X	X		
Conduct site visits first and last session for data collection – pre/post surveys, interviews, focus groups, observation (PSU)						X	X	X	X	X		
Collect survey after each session (FPL)						X	X	X	X	X		
Analyze Cohort 1 data (PSU)										X	X	X
Modify TMT collections and training manual (partners)										X	X	X
Conduct trainings for to inform librarians of TMT modifications (partners)										X	X	X

Digital Products Plan
Enriching Library Family Programming Using the
Smithsonian Institution’s Talk with Me Toolkits

Type

The primary digital products to be developed through this grant include a series of digital museum collections on the Smithsonian Learning Lab web platform (learninglab.si.edu). The Learning Lab is a free digital tool that encourages the creative and educational re-use of more than 5 million digital resources from across the Smithsonian Institution. The digital products, called Talk with Me Toolkits (TMTs), are digital aggregations of digitized museum objects along with recommendations for how to use them for intergenerational learning. These Toolkits will live on the Learning Lab and be free to use by anyone with access to the Internet (via desktop, tablet, or mobile device).

Availability

Designed for families with children ages 3 to 8, the TMTs are digital, thematic collections of museum artifacts with captivating videos and real-world photographs that support parent-child talk and learning. They take the form of digital "collections" hosted on the Smithsonian Learning Lab website. Each TMT includes recommended books and hands-on activities. The project team will modify six purposefully selected TMTs.

As TMTs take the form of Learning Lab collections, the only equipment, software, and supplies needed will be a compatible web browser (via desktop, tablet, or mobile device). The Learning Lab is a web-based software tool.

Access

The 6 TMTs modified and validated through these efforts, as well as the supporting tools to implement them in libraries will be shared online on the free and open Smithsonian Learning Lab platform. The Learning Lab requires only a standard web browser to use.

The Smithsonian utilizes its own Terms of Use to clarify ownership and authority for materials made available digitally: si.edu/termsofuse. The terms permit and encourage the reuse of digital materials in terms roughly equivalent to a CC-BY-NC license. Notification is provided to users of the Learning Lab via prominent links in the site footer as well as confirmation of awareness and adherence to the Terms when users create free accounts.

The creation of a registered account is not required to access the Toolkits, so using them requires no transmission of any identifiable information to the Smithsonian or any of the project partners. While the collection of personally identifiable information is not required to use Learning Lab collections, some users may opt to create an account so that they can take advantage of more complex functionality (and provide to the Smithsonian their data of birth and email address, at a minimum). We strive to exceed standards for the management of this data and in the case of student users, we exceed the standards for COPPA and FERPA compliance.

The Smithsonian has recently celebrated its two-year anniversary in the open access movement. In 2020, millions of 2D and 3D images and metadata records were re-classified using the CC0 Public Domain

Dedication. Currently, this project does not include Learning Lab collections, however we are exploring the impacts of expanding the use of CC0 for educational resources.

Sustainability

The TMTs are hosted on the Smithsonian Learning Lab and are part of the Smithsonian's robust technical infrastructure that ensures redundancies, backups, and routine adherence to the highest levels of Internet security required by the federal government. The Smithsonian has made a long-term financial commitment to the Learning Lab and plans to continue hosting the TMTs that reside there indefinitely, upgrading them, as needed, as web and mobile technologies advance. The Smithsonian's Office of the Chief Information officer ensures this infrastructure can meet the needs of today's users and can adapt to the changing needs in the future.

In terms of sustaining a safe environment for young people online, in collaboration with the Smithsonian General Counsel and the Smithsonian Privacy Office, the Smithsonian constantly monitors the publishing of user-generated collections on the Learning Lab to ensure compliance with our Terms of Use.

In 1997, Middle Country Public Library (MCPL) established the Middle Country Library Foundation (MCLF), a 501C (3) organization, to raise funds to advance the development of innovative library-based programs that focus on families, children, businesses, literacy and information technologies. The Foundation fosters dynamic programs created at MCPL (Family Place Libraries™, Miller Business Center, 2-1-1 Long Island Database and the Nature Explorium) that can be replicated regionally and nationally, enabling community libraries to better meet changing social and economic needs. MCLF is comprised of a 21-member volunteer board and supported by library staff to assist the Foundation with grant writing, fundraising, and project management.

Family Place Libraries (FPL) is MCPL's largest and most developed regional and national initiative. Expanding the traditional role of children's services, the overall goal of Family Place Libraries is to develop and establish a family-friendly environment by transforming libraries into community centers for literacy, early childhood development, parent education and engagement, family support and community information. MCPL serves as the main training center and provides staff support to run the initiative which has been replicated in over 500 libraries in 32 states. FPL successfully partnered with the Children's Museum of Manhattan to pilot and nationally disseminate their *Eat, Play, Grow* health curriculum, and works closely with *Help Me Grow* (a *Docs for Tots* initiative) to share information on child development programs and screenings. Family Place Libraries is positioned to grow and sustain these types of partnerships while disseminating information on a national level. MCPL is the national model for Family Place Libraries and incorporates all initiatives and programs into their own library services before dissemination to the national network of libraries. The Family Place Coordinator and team of four additional librarians work to create, implement, and disseminate programs and information to the national network.

Family Place Libraries trains libraries in the principles of early childhood development, parent support and emergent literacy. Network libraries are encouraged to develop relationships with local families, especially those who are new or typically underserved. Moreover, libraries organize partnerships and coalitions with community agencies and participate in professional development activities that address the needs of families. Early childhood spaces are specially designed areas of the libraries that are comprised of educational toys, technology, books, and collections for families, educators, and service providers. The Parent/Child Workshop, the centerpiece of the Family Place initiative, is a regularly scheduled 5-week series that brings together young children and their parents in an early childhood setting. Attendees can play with developmentally appropriate materials, meet other parents or caregivers, and become familiar with library and community resources. A librarian functions as a facilitator and each week professionals from local agencies with expertise in child development, nutrition, or speech and language development chat informally with participants about issues pertaining to their children or services that the agencies offer for families. Nationwide, the FPL network welcomes an average of 608,000 people into their Family Place spaces each month. Family Place Libraries works directly with staff from these libraries in order to continually offer diverse professional development opportunities and ensure our colleagues feel confident and empowered to work with families in their communities.