21st Century Museum Professionals Program

Sample Application 21MP-256421-OMS-24

Science Museum of Minnesota

Amount awarded by IMLS: $344,157
Amount of cost share: $345,875

The Science Museum of Minnesota will support transformative change toward inclusion, diversity, equity, and access among Upper Midwest museums by creating a durable community of practice. Using a field-tested model of professional development, the museum will collaborate with 20 small, underserved museums, across Minnesota, Iowa, North Dakota, South Dakota, and Wisconsin, to bring together 48 staff and researchers, virtually and in-person, over a period of two years to learn about theories, methods, and tools related to equity and find ways to adapt these ideas to their museums and professional networks. Through ongoing communication and consultation, the project will generate a leadership cohort of individuals with a solid grounding in complex equity issues. The project will not only develop resources, skills, tools, and mindsets to create more inclusive staff and institutions, but also more inclusive local and regional communities of professionals.

Attached are the following components excerpted from the original application.

- Narrative
- Schedule of Completion

When preparing an application for the next deadline, be sure to follow the instructions in the most recent Notice of Funding Opportunity for the grant program to which you are applying.

Museums in the Upper Midwest Strategizing for Equity (MUSE)

1. PROJECTJUSTIFICATION

Museums in the Upper Midwest Strategizing for Equity (MUSE) is an IMLS 21st Century Museum Professionals Program Project (21MP) conducted by the IDEAL Center at the Science Museum of Minnesota (SMM) in concert with 20 small, underserved museums from across the Upper Midwest—Minnesota, Iowa, North Dakota, South Dakota, and Wisconsin. This region can be described by the rivers that run through it; the Mississippi, the Red River of the North, and the Missouri. It is a land of farming and fishing, 4-H and state fairs, tribal lands and new immigrants, iron ore and lumber, international ports and oceans of wheat, small towns and big cities, liberal arts colleges and major research universities—and persistent disparities and inequities based on race, class, culture, gender, disability, and other marginalized identities.

1.1 Goals

The **overarching goals** of the project are to support 1) transformative change toward inclusion, diversity, equity, and access (IDEA) in the small, upper-midwest museum sub-sector and 2) the creation of a durable, regional community of practice. MUSE is based on an extension service model of knowledge diffusion developed through four closely related efforts: The Peer Alliance for Gender Equity-Pilot (2007 NSF GSE #0734095); PAGE Regional (2010 NSF GSE #1102903); iPAGE (2015 NSF AISL #1612640); and iPAGE 2.0 (2020 NSF AISL #2011859) all of which brought together teams of strategically placed individuals and prepared them to work with their colleagues to enact significant social change.

The central 21MP program goal the project addresses is **Goal 1:** *Support the professional development of the museum workforce, including those from diverse and underrepresented backgrounds* particularly **Objective 1.1:** *Develop new or enhanced professional development and training programs for the museum workforce.* The project will meet this goal through a robust, thoroughly field tested model of professional development (PD), described below in the **PROJECT WORK PLAN** section of this narrative.

The project will address—in a limited way—**Goal 2, Objective 2.2:** *Recruit future museum professionals from diverse and underrepresented backgrounds through paid internships, mentoring, and fellowship opportunities.* Project funds will support up to 5 STEM Justice interns—young museum professionals of color that are alumni of SMM's Kitty Andersen Youth Science Center (KAYSC) programs—as facilitators throughout the life of the project. A brief description of the STEM Justice interns can be found in the **Short and Long Term Audiences** section below.

1.2 The Need

Small museums face very specific challenges. They are the majority of museums in the US and they run on small budgets with goals that often far outstrip their resources. Some are in remote communities; some are in urban centers; either way, staff are often playing many different roles across a day or a week and doing their best by their mission and their community.

How can these staff engage in reflection about their local/regional setting; access ideas from other museums that face similar challenges, all while maintaining their workloads? National conferences are often built for staff at large museums like SMM, both in cost and in format. Webinars and online discussions are often inadvertently centered in the needs of large museums and/or a national context.

Museums generally evidence societal disparities in access and participation along race, class, gender, ability, and other demographic lines, in staffing, institutional histories, and visitorship (Dawson 2019). Imagine a small museum in the upper midwest, five hours from the capital of their state. A dozen full time staff work hard with a devoted cadre of volunteers to keep lights on, floors mopped, and exhibits working. Two of the staff worked at larger museums in the past and have a sense of the discussion that happens across the field about what museums are for; another handful are long-term employees; the rest are relatively new to the museum. The surrounding community includes a wide political spectrum, and is a mix of white and Native-identifying people, with many families including both histories. Perspectives on museums are influenced by both politics and by culture—skepticism about museums might be based on the history of how they have exploited Native communities, by politically-based ideas about climate change and other politically charged topics, and by experience with formal learning environments in schools. The staff very much want to engage with their local community and continue to have deep conversations about their discipline, why it matters, and how to share it in ways that are central to community concerns.

Transformation with respect to equity and inclusion will require museum communities to think in new ways about leadership and to go beyond technical strategies such as lowering admissions prices or purchasing more advertising. Museums must enact deep cultural change with the goal of creating truly equitable and inclusive working and learning environments for both staff and visitors. In order to engage in this kind of work, museum professionals need to be part of a collaborative, equitable community in which they can learn together, teach each other, and strategize about *and take* leadership action. Within the professional development (PD) literature, there is a strong emerging consensus about what constitutes effective professional learning. It is most productive when it is collaborative, sustained, directly tied to practice, connected to the larger social and

political context, and rooted in deep understandings of disciplinary knowledge (Stein *et al.,* 1999; Banilower *et al.,* 2007; Darling-Hammond *et al.,* 2009).

Conversations with professionals from the small museums that are the immediate audience of this project strongly indicate that they have received little PD focused specifically on their unique roles in their communities. They, too, need opportunities for Stein et al.'s (1999) "deep seated reexamination, ongoing experimentation, and critical reflection" that is situated in their particular institutions and communities. MUSE is designed to address these needs within the upper midwest. Those contacted are keenly interested in the proposed effort. All lamented that there are few mechanisms to bring them together in meaningful collaboration, focussed on their particular needs in their local/regional communities of practice.

In this project, we want to foreground the needs and concerns of small museums that share a regional political context, providing space for reflection and learning that are needed by all museums but hardest to come by for staff at small sites. We believe that high quality PD should be available to all museums, and also that by centering small museums in our region, we can provide an experience where discussion of their challenges are the norm, not the exception.

IDEAL Center Framework for Access and Equity: MUSE is grounded in the research-based *IDEAL Center Framework for Access and Equity,* originally inspired by Brotman and Moore's (2008) literature review. The Framework consists of three lenses focusing on: (1) understanding and interrupting systems of oppression operating within the Museum sector, including racism, classism, patriarchy, and ableism; (2) illuminating multiple perspectives, values, and beliefs within informal education and our disciplines (e.g. science, art, history, etc.) and the ways in which they privilege and/or marginalize different cultural perspectives; and (3) supporting participants in enacting new norms and disrupting harmful effects of status hierarchies as they take strategic action with respect to IDEA both within and outside of their organizations. These lenses are at the core of the curriculum for MUSE and are described more fully in the **Curriculum** attachment (Supportingdoc5.pdf).

The "how" of the curriculum is equally critical. In PD, the MUSE facilitation team models a variety of discussion structures and works with participants to adapt them in their own settings, including: affinity group discussions to share difficulties and discover common ground across professional identities; talking circles, which provide a structure for discussing difficult issues within an egalitarian, community space (Pranis, 2005); focused conversations, which lead a group through objective, reflective, interpretive, and decisional phases in consideration of a specific topic (Stanfield, 2000), and the development and sharing of leadership stories (Ganz, 2008) that galvanize and motivate the community to actively promote equity and inclusion in their institutions and communities. Participants also practice group norms that build a trusting culture in which every community member embraces the beliefs that everyone in the group has something to contribute and everyone has something to learn (Cohen & Lotan, 2014). See Letter of Support (Supportingdoc3.pdf) for a first person perspective on these ways of being.

Taken together, the lenses of the Framework and associated learning structures will support the MUSE community in: (1) developing an understanding of research tied to the lenses; (2) translating this research into practical strategies and mindsets related to learning in museum contexts; (3) flexibly adapting those strategies and mindsets to suit local contexts; (4) designing and implementing actions appropriate to their settings; (5) evolving systems to meet the needs of each and every learner and community member; and (6) engaging in continuous improvement efforts.

Dissemination Science, Networks, and the Extension Service Model: While much research-based knowledge is available to begin addressing inclusion concerns in museums, a key challenge is to not only understand *how* one gains increased knowledge but also how to help someone act on their new knowledge. Most innovations do in fact fail to bridge what Graham et al. (2006) have termed the *knowledge-to-action* gap. *Diffusion of innovations* theory provides a research and practice paradigm for describing how innovations diffuse—or fail to diffuse—throughout a social sector (Rogers 1988, 2003; Dearing & Cox 2018) and illuminates concepts to attend to in the design of efforts that effectively move knowledge into action within a social sector. *Social sectors* are collections of institutions operating in the same domain with similar functions, e.g. education or agriculture (Dearing 2008). The advantages of undertaking dissemination efforts across a social sector are many. People within a given sector can engage in efficient communication, tend to know the same success stories, hold the same institutions in high regard, and often closely monitor each other. These factors support the establishment, strengthening, and perpetuation of dense social networks capable of ongoing, decentralized action. Lastly, working within a social sector makes it possible to jumpstart change through a centralized effort (e.g. MUSE) that influences a subset of opinion leaders, change agents, and champions who take on the roles of advocacy, information sharing, implementation, and resource allocation (Dearing 2008, 2009).

MUSE is concerned with diffusion and dissemination processes in the small, upper-midwest, museum sector. The *knowledge* we aim to diffuse is captured within the IDEAL Center Framework lenses as described above. The *action* we are interested in is the dynamic range of activities needed to apply this knowledge in the myriad local contexts that make up the MUSE community. These activities include adapting knowledge to local contexts, assessing barriers to knowledge use, selecting and implementing interventions, evaluating outcomes, and sustaining ongoing efforts (Graham et al. 2006).

The MUSE extension model—initially mandated by NSF for PAGE and its focus on gender equity in K-12 science—is based on the U.S. Department of Agriculture's (USDA) highly adaptive agricultural extension service (*Figure 1*). This extension service model was originally designed to enable the agricultural workforce to put agricultural knowledge into

Figure 1: USDA Extension Service Model
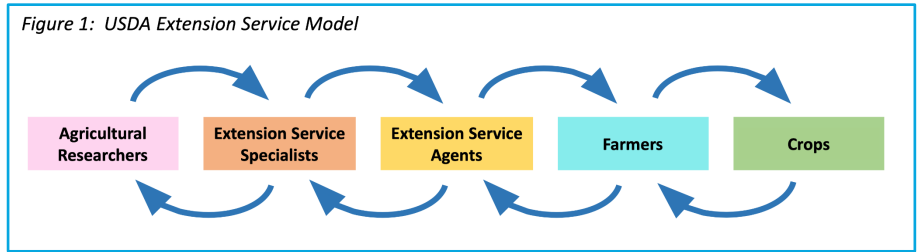
action to grow better crops in ways that attended to local and regional contexts. Key elements in the USDA system include agricultural researchers, a cadre of extension specialists charged with bridging the intellectual world of researchers with the pragmatic world of farmers, local extension service agents (ESAs) in close spatial proximity to farmers, and the farmers themselves. The intention of the USDA extension model is to have knowledge flowing in both directions, as shown by the arrows in *Fig. 1*, with research informing practice and practice informing research in robust feedback loops. We will return to this approach in the **PROPOSED ACTIVITIES** section below.

1.3 Short- and Long-Term Audiences for this Work:

The vision of MUSE is to create a leadership cadre of 48 individuals (ESAs) from 20 underserved museums in the Upper Midwest whose members have experienced transformational PD with respect to addressing complex equity issues in informal museum learning. These leaders will become familiar with research, theories, methods, and tools around equity and have ample opportunity to apply and refine them in ways that are highly sensitive to their own specific contexts. *(Note: We refrain from using "target group" language in this proposal, instead using the language of "ESAs", "change agents", or "participants.")*

MUSE will recruit and work with ESAs from a wide range of cultural institutions including art, history, children's, science and nature, and other informal learning institutions that are part of the varied cultural fabric of our region. 75% of the institutions and participants involved will come from beyond the Twin Cities metro and are referred to as *regional participants* throughout this narrative. Please see the attached **Recruitment** document and **Letters of Commitment** (Supportingdoc4.pdf & Supportingdoc1.pdf) for more detail on potential participating institutions and plans to recruit them into the project. It is critical to note that MUSE will not ask that they add activities to their already established programs—rather, MUSE will assist them in infusing and incorporating research-based theoretical models, strategies, tools, and methods *into their existing work.*

At the time of submission, we have not comprehensively reached out to possible partner museums, recognizing the burden of engaging them in planning at this early stage. When the project launches in the fall of 2024 and throughout the project, we will engage in listening sessions with potential and actual participants to shape the content and goals in response to their particular organizational and community needs. These efforts are described in more depth in the **Project Work Plan** below.

The selection criteria (see **Team Composition** below) will ensure that MUSE ESAs will be influential with the longer-term beneficiaries of the effort including museum staff, volunteers, board members, donors, and other stakeholders in their institutions and communities. Based on the average size of the participating museums, we estimate that over the course of the project, each MUSE ESA will share their learning with a minimum of 24 other individuals (including staff, volunteers, board members, etc.) for an estimate of 1,152 (e.g. 48 x 24) secondary beneficiaries of the project. Moreover, the emphasis on capacity building of the MUSE ESAs will contribute to sustaining this work beyond the life of the grant.

The next layer out of beneficiaries for the project is impossible to predict numerically but includes everyone that engages with these institutions. The ultimate intended impact of this work is not just stronger employees and institutions, but also strong local and regional communities that have more resources, skills, tools, and mindsets to become truly inclusive.

The museum field more broadly will benefit from the lessons learned through the project evaluation, including uncovering challenges and opportunities for IDEA work in the sector. A publication from the iPAGE 2.0 effort (Haupt et al., 2022) includes several practical recommendations—phrased as questions—for IDEA work in museums including: What progress has already been made, Where do you want to be, How are you getting there, and Who is doing the work? We anticipate MUSE will contribute to refined recommendations for small museums engaged in IDEA work.

An additional short-term audience is 5 young museum professionals of color who will join the IDEAL Center facilitation team for each of the program events. The STEM Justice facilitators are the KAYSC's (a long-term, out-of-school-time pathway program for youth who are under-represented in STEM) high school program alumni. STEM Justice is a movement to redefine STEM as a tool for dismantling systems of oppression and constructing collective liberation. The STEM Justice facilitators are emerging IDEA practitioners and leaders that facilitate PD centered around the STEM Justice curriculum (NSF DRL #1612782) with both internal SMM and external constituencies. Their participation in MUSE will allow them to further develop their capacities to facilitate complex IDEA learning in addition to mentoring them into the world of small museums.

2. PROJECT WORK PLAN

2.1 Proposed Activities

Figure 2 provides a visualization of the MUSE Theory of Action. The overarching goal of the project is to support transformative change toward IDEA among our participants, a cohort of staff from small museums in the region, with the larger research and evaluation knowledge base informing *action* (**arrow A**) and practitioner knowledge in real world contexts informing *research* (**arrow B**). Diffusion or dissemination of innovations directly between researchers and practitioners—bridging the knowledge-to-action gap—is generally not effective on a large scale in complex systems; intermediaries are needed to bridge the social, and often physical, distance between the two groups. In our theory of action, the extension service model is the primary vehicle for supporting this two-way translation and diffusion.

Figure 2: MUSE Theory of Action
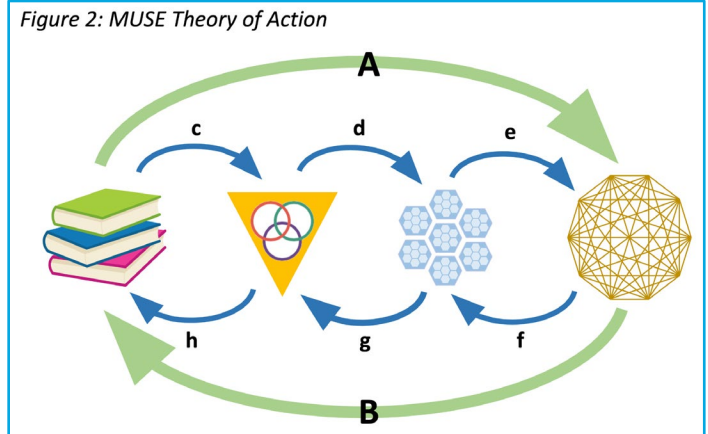
In a previous section, the USDA extension service (*Figure 1*) was described as including researchers, extension service specialists, extension service agents, farmers, and crops. In MUSE, the extension service model includes the larger subsystem of researchers and evaluators (**the book**), the MUSE facilitation team (**the Venn Diagram**), leadership teams from regional museums (**the honeycomb**), and museum stakeholders including staff, volunteers, board members, etc. (**the web**). In both the USDA and the MUSE models, feedback loops (**arrows c through h**) are bidirectional, with knowledge and innovations flowing both ways. This reciprocal movement of knowledge and action ultimately aims to support transformative change toward IDEA for individual museums and ultimately the larger sector as a whole.

Programmatically, the MUSE facilitation team engages teams of 2-3 change agents from participating museums in sustained and face-to-face PD grounded in the knowledge base underlying the IDEAL Center Framework (**feedback loop d-g**). Equipped with a wealth of knowledge and tools, and an understanding of community responsibility, change agents engage and influence others both within their home institutions and throughout their networks (**feedback loop e-f**) resulting in cultural and associated technical changes. Change agents adapt what they are learning and take collective and individual action relevant to their contexts. Thus, MUSE is not a train-the-trainer model; the implementation processes are non-linear, creative, iterative, context-specific, and emergent. As change agents gather feedback from their colleagues, they bring it back to the MUSE community through virtual and face-to-face interactions (**feedback loops e, f, g**). The evaluation will focus on those parts of the model represented by **arrows d and g**. The evaluation methods, and analysis, are described in detail in the **Evaluation Activities** below. By incorporating both of these realms—program and evaluation—across this slice of the museum sector, the project will demonstrate and gain insight relevant to the field about the challenges of completing the grand feedback loop represented by **arrows A and B**, creating a complete knowledge-to-action system attuned to the particular needs of creating and understanding change towards IDEA in the small, regional museum sector.

PD Program Design: The MUSE program consists of 11 days of face-to-face and virtual experiences spread across 6-12 months. To accommodate the total number of participants, we will host 2 cohorts, with 24 participants from 10 institutions in each. Each cohort will spend 5 days together in the MUSE Institute. The MUSE Institute begins to build a conceptual background, attitudes, and skills that are required for tackling equity and inclusion issues within organizations. In year 2 of the project, both cohorts (all 48 individuals) will come together for three 2-day Colloquia. During the Colloquia, change agents will shift from a focus on their own understanding of inclusion issues, to applying their understandings and continually building their skills within their own sites with their colleagues. During this phase, change agents work explicitly to improve their own efficacy, both in articulating the meaning and value of improving the equity and inclusion climate within their institutions, and in adapting knowledge, norms, and practices for their own contexts.

Team Composition: MUSE teams will comprise: (1) The **Team Captain** is the Director/CEO with formal influence over resource allocations within the organization. They are responsible for having an overall understanding of the effort, making sure that individuals have the time to devote to MUSE, and that barriers are reduced for the team to do site-based IDEA work. (2) **Team Members** work collectively with the Team Captain to plan and coordinate action, share dilemmas, and develop their collective capacity for transformative leadership. Roles/responsibilities represented might include board members, exhibits, public programs, education, visitor services, volunteers, etc.

All individuals on the team will function as **Change Agents,** acting to transform their organizations with respect to IDEA. They are chosen by sites based on the extent to which they are influential through informal mechanisms and/or because they are in positions to effect change within the organization. They serve as champions, connectors, and role models for change.

The application process will require both team and individual narratives that present a clear statement of the IDEA challenges in their institution and community, a coherent vision of how participation in the project might inform work on the challenges identified, and a considered plan for how each team member will contribute to IDEA efforts within and across their organization. Our experience in PAGE and iPAGE is that the involvement of the Director/CEO is critical to supporting vision and strategy. Accepted teams will have the Director/CEO listed as the Team Captain, a team that spans a variety of other positions and departments, and to the extent possible, represent the cultural, racial, and economic diversity of the surrounding community. Selection also will consider institution size, type, geography, and audiences served to create a balanced cohort.

Program Components: The MUSE **Institute** will be attended by all participants and focus on developing skills and knowledge related to the lenses of the MUSE Framework (described above and in more detail in attached **Curriculum** document (Supportingdoc5.pdf). This will lay the groundwork for norms and facilitation processes that allow for vulnerability, effective collaborative work, and perspective taking. In the **Colloquia**, change agents will shift from a focus on their own understanding of IDEA issues in museum settings to exploring and gaining skills in becoming effective change agents. These skills involve clearly communicating purpose in ways that are emotionally motivating, describing and shaping potential paths to effect change, and adapting strategies and actions from MUSE in their spheres of influence.

The Institutes and Colloquium 1 (C1) will take place in person at the Science Museum of Minnesota in St. Paul. As confirmed by the iPAGE project which convened 3 cohorts of Informal STEM Institution leaders during the height of the COVID-19 pandemic, this in-person meeting is essential to building the larger community of practice that is central to the goals of the project. Colloquium 2 (C2) will take place virtually, capitalizing on the relationships established during the Institutes and C1, and taking advantage of the flexibility and accessibility this mode of learning supports. The final event of the project, Colloquium 3 (C3), will convene in person in the spring of the final project year. This two-day event is a forum for the MUSE ESAs to review, reflect, evaluate, and share their individual and collective work with the MUSE community and is an opportunity for MUSE community members to make recommendations and help craft plans for the future. The event will also be a celebration of the MUSE community—its work, lessons learned, and the innovative ideas generated.

Implementation Support: Between these events, individuals and teams will adapt, implement, and refine ideas, strategies, and tools from the IDEAL Center Framework their colleagues, volunteers, board members, etc. The MUSE facilitation team will provide bi-monthly virtual check ins and ongoing consulting services focused on ESA's context-specific needs and challenges as they work at their sites, methodologically in line with many well-documented approaches to reflective practice, action research, and collaborative inquiry (e.g. Schön, 1983; Carr and Kemmis, 1986; Altrichter, et al. 2000; Lewis, 2002; Freire, 2000; Pattison et al., 2013). These practices and connections can be sustained after the MUSE experience and will allow the leaders to remain responsive as local, regional, and national conversations—and as ESA's knowledge and understandings about inclusion—continue to develop beyond the life of the project. Additionally, MUSE staff will provide informal consulting for participants seeking significant (>$5000) funds for larger capacity-building initiatives.

Evaluation Activities: Evaluation is critical to this project in terms of assessing its ongoing effectiveness, coordination of the regional community of practice as described above, and documentation and sharing of the effective practices and approaches employed by ESAs towards transformative action around IDEA work in small museum contexts. The plan outlined in the **Logic Model** (Supportingdoc6.pdf) will provide the necessary data to measure the project's success in meeting its outcomes, particularly around developing an enhanced PD program for small museum professionals, including those from diverse and underrepresented backgrounds. The methods proposed will capture both individual and team-level data for a more holistic assessment of the program's effectiveness. Data collections and analyses will be carried out collaboratively between facilitators and evaluators to ensure alignment with program framework and philosophy.

Proposed formative evaluation activities support the iteration and development of PD events and cohort support structures. Methods include: 1) listening session documentation and analysis; 2) ongoing post-Institute and post-Colloquia participant survey data collection/analysis to capture feedback on the program experience, individual growth and learning, and on the key cohort support structures identified in the listening sessions; and 3) the development and analysis of a reflective activity to be completed by museum teams after Colloquium 2 to support the facilitators, program designers, the project advisor, and the teams themselves to better understand how teams are responding to and adapting the content to their unique contexts, and will uncover how the team is seeing potential barriers to and opportunities for IDEA work in their context. Formative evaluative data will be aggregated, de-identified, and shared with program participants to foster and encourage an evaluative lens on their own actions to promote equity in museum settings. Analyses shared with project leaders will include aggregation of survey data by participant characteristics, to ensure the implementation of the PD program is working for the wide array of intersected identities of participants represented.

Proposed summative evaluation activities support assessment of the effectiveness of the PD program for small museum professionals. Final post-program surveys will be administered at the end of Colloquium 3 to capture feedback on the overall program experience, individual learning regarding the core concepts of inclusion, diversity, equity, and access and related

research, and individual growth around confidence to apply learnings to the museum context. Several months after Colloquium 3, participating museum teams will be asked to complete another reflection, this time to capture the longer-term impact of the PD program, including actions taken, practices and approaches applied, barriers encountered and workable adaptations, and reflection on next steps. Evaluators will engage in joint meaning-making with project designers, advisor, and facilitators, as well as with participants, to summarize the impact of the program and to evidence its potential for sparking and sustaining change in small museum professionals and their institutions.

We will also conduct a summative evaluative process for the secondary project goal: **Goal 2:** *Recruit and train future museum professionals, including those from diverse and underrepresented backgrounds*. The evaluation team at SMM has an established relationship working with KAYSC youth and young adult interns. Summative evaluative activities with this group of emerging museum professionals will include: 1) documentation of their sensemaking of participant feedback on post-program surveys during years 1 and 2 of the project; and 2) a focus group session comprising all 5 STEM Justice Interns after Colloquium 3 discussing topics such as: the benefits and challenges of their facilitation training with the IDEAL Center, the nature of the alignment between their expectations of this professional experience and their reflection on the experience of it after its conclusion, their intention to build on this professional experience through their career pathway, and more. Focus group and intern sensemaking data will be compiled, thematically organized, de-identified as far as possible, and shared back with STEM Justice interns for memberchecking and review. Then, the compiled report will be shared with IDEAL Center staff and the broader museum in order to influence future effective practices around recruiting and training emerging museum professionals, particularly those from diverse and underrepresented backgrounds, as in this case.

Project Workflow: As shown in the attached **Schedule of Completion**, milestones in FY01 include the development of evaluation protocols and instruments, recruitment of Cohorts 1 and 2, listening sessions with prospective and accepted institutions and individuals, the development and refinement of differentiated learning experiences for affinity groupings, and the launch of Cohort 1 in the spring of 2025. Milestones for FY02 include the launch of Cohort 2 in the Fall of 2025, further development and refinement of the program in response to evaluation findings, and convening of the three formal colloquia and associated virtual learning experiences. At the end of FY02, we will finish all program work, continue to offer support to participants through informal mechanisms, and turn to the completion of evaluation findings and products.

2.2 Risks
A risk in any PD project is that it is not responsive to the needs of the participants, that the curriculum and/or structures are not developed with significant input from important constituents and beneficiaries, and that time to adapt or respond to input is lacking. The expanded time frame of learning in MUSE, from the Institute through the final Colloquium is a structural response to this need for time to adapt. The ongoing project evaluation will be critical to addressing this risk.

IDEA work is inherently political and takes place in the context of local, state, regional, and national political conversations. The IDEAL team has deep experience and skill working with individuals and organizations across the political spectrum in both urban and rural communities. The application process will be key in identifying individuals and organizations that are "ready" to navigate these waters.

The decreased—but still present—project risks of COVID-19 associated with in-person meetings still persist. The IDEAL Center's experience with iPAGE—which was held online via Zoom through the fall of 2023—during the most acute phases of the pandemic is that virtual participation results in significant loss of participant social and networking opportunities. The IDEAL team has developed significant expertise in constructing meaningful virtual learning spaces, and we will hold C2—during the winter—online during this season of historically highest risk for program interruption.

Lastly, recruiting and the institutional capacity for participants to allocate time to the program are risks. The IDEAL Center's experience is that while participant's time is always at a premium, it is the *additional* costs of travel and participation fees that most significantly contribute to institutions electing to not participate. As such there will be no fees for participation in MUSE, and the budget has a large portion of funds (>$100,000) dedicated to support the participation of individuals and teams, particularly from beyond the Twin Cities Metro. We also anticipate that recruitment efforts will need to be quite active and require a high level of 1-to-1 contact with potential participating individuals and institutions. This has been true for PAGE and iPAGE as well, and the project team is prepared to invest the time and resources needed.

2.3 Project Planning, Implementation, and Management
Aki Shibata, Project Director, is the Director of the IDEAL Center at SMM and will have primary responsibility for program management, oversight, museum relations, and program modification in response to evaluation findings and external advisory feedback. She will be an instrumental connection to museum professionals of color, drawing on her history of leading LinCT (NSF: DRL-1513009 and the STEM Justice facilitators. She is a practicing visual and experiential artist, serves as board chair of the Victoria Theater Art Center, and brings her teaching experience at the Minneapolis College of Art and Design.

Travis Sandland, Sr. Project Lead, and Demetrios Vital, Project Lead, will share responsibility for program planning and

implementation. As PAGE Co-PI and iPAGE 2.0 PI, Travis was instrumental in the design and implementation of PAGE, iPAGE, and iPAGE 2.0; and the creation of the IDEAL Framework and the MUSE extension model. Travis brings a STEM background. Demetrios' background in history and social sciences that inform his pedagogy and his role in fostering long-term relational and prosocial learning communities. Together, Travis and Demetrios have led the IDEAL Center team in the development and facilitation of PD experiences for professional audiences in a wide range of sectors and geographies.

Evelyn Christian Ronning, PhD, Evaluator, is an Evaluation & Research Senior Associate at SMM, and will lead the project evaluation team. Evelyn specializes in qualitative and culturally-responsive methods, and has led federally-funded research and localized evaluation efforts examining such topics as: promoting organizational change around equity at museums; informal science education learning; examining visitor understandings of belonging; developing strategies to inclusively introduce underrepresented youth to geoscience research, networks, and career pathways; and others.

2.4 Resources Needed

The project requires significant staff time and attention, which will be provided through both grant and cost-shared organizational funds. Participant/community feedback is central to the process and to the outcomes and will be gathered through the work plan described above. While a clear need, the scope and scale of the current project precludes significant "mini-grant" funds for site-based implementation: a decision reached in consultation with potential participating institutions, recognizing the strength of the MUSE project in fostering participants' approaches to equity in their existing work.

We are requesting $344,157 from IMLS over 2 years, to be matched by a $345,875 Cost Share in 1) salaries and benefits from the museum's operating budget to carry out this work and 2) from participant's time participating in the project. The total project budget is $690,032. Essential project personnel are listed above.

2.5 Tracking Progress

The Leadership Team work closely with one another and will continually assess the project's progress. The measures detailed in the attached **Performance Measurement Plan**—along with checks on how the key milestones—will be used to track progress. External perspectives can often illuminate problems in ways that internal voices may miss. **Cecilia Garibay, Ph.D** (resume and Letter of Commitment (Supportingdoc1.pdf) included) will join the effort as an external advisor. In her work, Cecilia bridges the worlds of research, evaluation, and practice. She brings a bicultural/bilingual perspective and specializes in culturally responsive and contextually relevant research and evaluation approaches (e.g. Garibay et al., 2015). She will participate in virtual semi-annual meetings and has agreed to be available by phone and email throughout the life of the effort.

3. PROJECTRESULTS

3.1 Intended Results:

Dedicated to supporting diversity, promoting inclusion, increasing access, and working toward greater equity in our regional museum landscape, MUSE is designed to support leaders in bringing about meaningful and lasting institutional change. The project will have concrete impacts on participating individuals and organizations (see Evaluation Activities above for more detail), and support the creation of a durable regional network of small museum professionals that can and will continue to work both individually and collectively to transform their institutions and the larger field. Based on our experience with PAGE and iPAGE, this informal network will persist for years to come.

3.2 Participant Group Changes:

We anticipate the capacity of participants to act as ESAs will greatly increase as a result of their involvement, with significant changes in their knowledge, preparedness, and application of concepts related to the MUSE Framework. The **PAGE Evaluation Summary** (Supportingdoc7.pdf) shares evidence of the powerful positive impacts on individuals, classroom practices, school climate, and district policies and gives insight to the scale and impacts the MUSE community will achieve.

3.3 Products:

The effort will produce several new and refined PD models tailored to the needs of small museums, which will then be reused for future IDEAL Center PD efforts. Internally, the Museum will have gained a significant knowledge base around PD strategies that are likely to work in the future, and as a result of the project evaluation will have stronger mechanisms for gathering and using new data that informs related efforts.

3.4 Sustaining the Benefits:

The products and internal processes that are developed through this project will outlive the grant project period and be used with future learning communities as they work toward institutional change with respect to inclusion, diversity, equity, and access. Critically, the MUSE community, once established, will persist and continue to have positive impacts on their colleagues, institutions, visitors, and communities far into the future.

SCHEDULE OF COMPLETION - Science Museum of Minnesota
MUSE: Museum in the Upper Midwest Strategis for Equity

Calendar Year: 2024 Aug-2025 July

Project Year: FY01 - YEAR ONE

Month	A	S	O	N	D	J	F	M	A	M	J	J
Programing												
Recruting cohort1	▩	▩	▩									
Recruting cohort 2							▩	▩	▩			
Cohort 1 listening session(s)				▩	▩							
Cohort 2 listening session(s)										▩	▩	▩
Program planning						▩	▩					▩
Cohort 1 Institute (5 days)								▩				
Cohort 2 Institute (5 days)												
Cohort 1 and 2 (2 days inperson Colloquium)												
Cohort 1 and 2 (2 days virtual Colloquium)												
Cohort 1 and 2 (Opt in virtual gathering)												
Evaluation												
Participant/Team characteristics				▩					▩			
Listening sessions support				▩	▩				▩	▩		
Institute surveys collection/analysis								▩				
Colloquia surveys/reflections collection/analysis												
Summative meaning making/reporting												

Month	A	S	O	N	D	J	F	M	A	M	J	J
Programing												
Recruting cohort1												
Recruting cohort 2												
Cohort 1 listening session(s)												
Cohort 2 listening session(s)												
Program planning	�		▪		▪		▪		▪			
Cohort 1 Institute (5 days)												
Cohort 2 Institute (5 days)		▪										
Cohort 1 and 2 (2 days inperson Colloquium)				▪				▪				
Cohort 1 and 2 (2 days virtual Colloquium)						▪						
Cohort 1 and 2 (Opt in virtual gathering)		▪								▪		
Evaluation												
Participant/Team characteristics												
Listening sessions support												
Institute surveys collection/analysis	▪											
Colloquia surveys/reflections collection/analysis		▪		▪		▪		▪		▪		
Summative meaning making/reporting									▪	▪	▪	▪