



Museums for America

Sample Application MA-253341-OMS-23
Project Category: Lifelong Learning

Intrepid Sea, Air and Space Museum

Amount awarded by IMLS:	\$151,546
Amount of cost share:	\$151,546

The Intrepid Sea, Air and Space Museum will pilot Inspiration Academy, a new teacher training and resources program designed to help K–12 educators teach inclusive STEM, history, and social studies, built on the museum’s decade-long experience developing teacher professional development and providing of continuing education credits to teachers in New York State. Project activities include recruiting early-career teachers from Title 1 schools; implementing professional development opportunities, including in-person and virtual seminars and institutes; and conducting a program evaluation. The project will address early-career teacher attrition rates by fostering a sense of belonging in the profession and rekindling the joy and inspiration which brought individuals to teach.

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 current Notice of Funding Opportunity for the grant program and project category to which you are applying.

NARRATIVE

Intrepid Sea, Air & Space Museum

Inspiration Academy: Supporting Joyful, Welcoming Schools by Supporting Education Professionals

Project Justification

Project Summary: The Intrepid Museum is respectfully applying for a grant from IMLS to pilot its Inspiration Academy. The Academy will offer robust training and resources for teaching inclusive STEM, History and Social Studies for K-12 teachers. There will be a special emphasis on supporting early-career BIPOC teachers and/or teachers serving primarily BIPOC students in Title 1 Schools. The Inspiration Academy will provide professional development opportunities, including in-person and virtual seminars and institutes, to accommodate individual educators' needs and schedules. Our Inspiration Academy will build on the Museum's decade-long experience serving as a New York State Continuing Teacher and Leader Education (CTLE) credit and New York City P-credit provider of teacher professional development, centered on the integration of STEM and history, as well as four years of experience delivering 10-day long NEH-funded Teacher Institutes in person and remotely.

With the launch of an Intrepid Center for History and Innovation, described in our Strategic Plan Summary, the Intrepid Museum will amplify the real experiences of those on the frontlines of history and the stories behind the engineering marvels in our collection that were shaped by and, in turn, changed the course of world history. Through a focus on teacher professional learning and support during the crucial first five years in the classroom, the proposed project addresses the following program goal and associated objective of Museums for America:

Goal 1: Lifelong Learning: Empower people of all ages and backgrounds through experiential and cross-disciplinary learning and discovery

Objective 1.3: Support in-school and out-of-school programs

How will your project advance your museum's strategic plan?

As a non-profit educational institution, education is at the heart of all that we do. We work to remain relevant by engaging with myriad communities and by listening and responding to their needs and interests. The need for receiving respect as professionals, the need to belong to a welcoming community and the need for continued opportunities to learn have been clearly articulated by teachers. In our strategic planning, Museum staff has taken this into account.

The proposed project will support one of the three keystone initiatives in the Intrepid Museum's education strategic plan over the next five years, providing a powerful series of training for educators on the integration of inclusive STEM and history-based collection materials and pedagogical approaches in order to support all learners and foster belonging in the classroom. This plan reflects the next step for growth in a long history of supporting teacher professional development, including numerous offerings for New York City-based classroom teachers, coaching for out-of-school time educators through New York City's Department of Youth and Community Development, and four institutes for K-12 teachers supported by the National Endowment for the Humanities. This project also builds on the Museum's recent NEH-funded *Full Muster* project, which draws upon collections across several naval ship museums and archives, to explore underrepresented stories in U.S. Navy service from World War II through the present. The new content includes stories of Black, Indigenous, People of Color (BIPOC) and LGBTQ service members in the Navy, and also highlights the contributions of diverse innovators in history and aerospace engineering. We expect that these historic examples will resonate with our audiences, who too often do not see themselves represented in the American story as traditionally told. Many of the inclusive resources developed are now made freely available in the IMLS-supported Intrepid Museum

Learning Library, currently in its beta testing phase, and planned to go live by September 2023. The Learning Library includes teacher resources for a range of audience groups, such as K-12 students, families, audiences with disabilities, and community groups. The Learning Library will be regularly updated to include new lesson plans, activities, tools, and resources that the Museum’s education department is continually developing in response to changing needs of our constituents. This, and the Museum’s collection of nearly 20,000 objects, archives and media items, position the Intrepid Museum to provide a robust *Inspiration Academy* for teacher professional learning and community building, a place where they can recharge and reinvigorate themselves as the professionals and scholars they are.

What need, problem, or challenge will your project address, and how was it identified?

Numerous studies exist on the importance of representation in the classroom to encourage a sense of belonging among students, particularly in STEM (highlighted by the U.S. Department’s recent announcement of “YOU belong in STEM,” an initiative to promote a sense of belonging for underrepresented students) but also in other academic pursuits. More recent work is surfacing about this same need for belonging among BIPOC teachers and also, as referenced by groups such as Beyond 100K, how impactful a teacher can be toward creating a welcoming classroom, given the support. Encouraging teacher retention in the early years of the profession is of paramount importance, especially for teachers of color who are radically underrepresented. According to a 2021 Pew Research report, “fewer than one-in-ten teachers were either Black (7%), Hispanic (9%) or Asian American (2%). And fewer than 2% of teachers were either American Indian or Alaska Native, Pacific Islander, or of two or more races.”ⁱⁱ While New York City has a much more diverse teaching workforce than the national norm, with 42% identifying as being non-white, more than 80% of the students are non-white. In addition, the teaching force in Manhattan and Brooklyn has been getting whiter according the New York City Department of Education. In 2019, New York State had 200 districts with no teachers at all who were not white, while the students across the state have become more racially diverse.

Much work around addressing the shortage of BIPOC teachers in the classrooms is focused on recruitment, but with so many leaving the classroom, recruitment is only part of the problem:

“Recruitment is great...But if you don’t keep them, it’s like putting water in a bucket with holes in the bottom.”ⁱⁱ

While federal studies show that approximately 8% of teachers leave the profession annually, 44% leave within the first five years of teaching.ⁱⁱⁱ In a report released by the RAND Corporation, in 2021, Black teachers were more than twice as likely as other teachers to indicate that they planned to leave the profession. Additionally, Black male teachers, who make up only 2% of the teachers overall, leave at high rates due to isolation in the profession^{iv}. *The Inspiration Academy* (the *Academy*) has the goal of sustaining early career BIPOC teachers and/or teachers in majority BIPOC schools by addressing documented causes of burnout and attrition among these teachers, particularly in a post-pandemic era. The *Academy* aims to affirm and celebrate teacher identities and create peer support networks among participants, fostering a professional learning community (PLC). The *Academy* will provide resources that reflect inclusive contributions to history and STEM innovation, which teachers in turn can share with their students in an inclusive classroom. Lastly, The *Academy* will provide experiences for teachers as learners and as professionals – experiences such as sitting down with historians and today’s innovators, going behind the scenes in historic spaces, and discussions with policy-makers. By providing these opportunities, the *Academy* experience will foster a sense of belonging in the profession, and encourage a rekindling of joy and inspiration which brought individuals to teaching in the first place, and which can sustain them through the five-year mark.

Leveraging the multi-layered content and collections of the Intrepid Museum, the Academy will be interdisciplinary in focus, supporting the National Social Studies Council C3 Framework: Career, College and

Civic Life, while also incorporating the engineering and technological accomplishments tied to the Next Generation Science Standards. To support early career teachers, the curriculum will also touch on the four main components for effective teaching as spelled out by the Danielson Framework: (1) planning and preparation, (2) the classroom environment, (3) instruction, and (4) professional responsibilities. To show respect for their time and commitment as working professionals, who will be working with us and providing feedback and input as we develop and pilot a robust menu of programming in a variety of formats and who will contribute to the evaluation and iteration of the project, all teachers taking part in extended experiences will receive a stipend for their time. In addition, participant teachers in New York State-based schools will receive CTLE (Career and Teacher Leader Education) credit.

Who is the target group for your project and how have they been involved in the planning?

Because studies have indicated that not only are newer teachers at risk of leaving in higher numbers than their more experienced counterparts, and BIPOC teachers especially express a lack of belonging in the field, the *Academy* will target and recruit in-service teachers, primarily within their first five years of practice, specifically those who identify as BIPOC or who teach in schools and districts serving largely BIPOC student populations. The Intrepid Museum works closely with the local and state Departments of Education (DOE) to enroll and support teachers. The Museum is approved by NYS and NYC DOE to provide Career and Teacher Leader Education (CTLE) credit for New York State teachers and “P-credit” courses for New York City teachers. The Museum is also an active member of the Beyond 100K network, dedicated to listening to and responding to the needs of STEM teachers in order to support and assist them in their work. The evolution of professional learning at the Museum has been shaped by professional conversations with teachers through these partners and evaluative feedback from teacher-participants in the Museum’s professional development programming. Over the course of the project approximately 655 teachers will take part in learning with each other through the *Academy*. For teachers unable to participate in on-site professional development, the Museum will offer virtual opportunities. The Museum has over 20 years of experience in virtual learning offering programs to serve home and hospital bound K-12 students, veterans and older adults. During the pandemic, all programs became virtual in both synchronous and asynchronous formats, including our 2020 10-day NEH Summer Institute that was transitioned to an entirely virtual format with the help of internal and external experts in remote learning and education technology. While this was a tremendous undertaking, it allowed the Museum to pilot and accelerate one of its most comprehensive and rigorous professional development institutes paving the platform and building the foundation for the Inspiration Academy.

Who are the ultimate beneficiaries for this project?

When both students and teachers see that they belong in a classroom and meaningfully contribute to the overall educational landscape, then all parties benefit. Students need to see teachers and mentors who look like them and come from the same backgrounds. Talia Milgrom-Elcott, founder and Director of Beyond10K, indicates that “schools around the country have shown that when students, especially students of color, experience joyful, authentic, rigorous STEM and know that they can succeed, they do – and, in fact, that in such schools, all students improve.”^v The same is true for history civics and social studies. Research shows that non-white students often perform better on standardized tests, have better attendance, and are suspended less when they have at least one teacher of the same race.^{vi} There is some evidence that this is not only the “role model” effect, but also that teachers of the same race have higher expectations of the students. Even when the teacher is white, a conscious effort to use inclusive curriculum, employ culturally responsive pedagogy and reflective practice, and to collaborate with BIPOC colleagues, can create a classroom where everyone belongs. By supporting and sustaining 655 teachers, we anticipate impacting over 20,000 students based on the number of students teacher-participants in past professional learning experiences have reported being responsible for in their typical school year.

Project Work Plan

What specific activities will you carry out and in what sequence?

Over the course of the project, we aim to work with affinity partners and teachers to identify needs, disseminate professional development opportunities and *Academy* applications, and connect directly with the target audience. Affinity partners include *Beyond 100K*, a national network of educational leaders and partners (of which the Intrepid Museum is one) focused on preparing and retaining teachers, especially for schools serving majority BIPOC students; the New York City Department of Education Office of Curriculum, Instruction and Professional Learning, with whom the Museum has a long-standing history of collaboration; and local colleges of Education such as Hunter College, Metropolitan College of New York and Medgar Evers College, who graduate a diverse teaching force.

The *Academy* will progress in three stages offering a menu of learning opportunities throughout, scaling up and reiterating over the course of the project to include our observations, as well as participants' feedback and evaluation results. For all three stages, formative and ongoing evaluation will create a feedback loop with participants which will inform and better the experiences provided. The target audience will be invited to apply as a part of a year-long cohort, including participation in the Institute and the Seminars, as well as associated assessment and evaluation, creating a Professional Learning Community which will further advance the *Academy* goals. Seminars will also be open to other teachers unable to commit to an institute. Each type of *Academy* session will incorporate aspects that inspire and foster joy in learning through hands-on experiences, interactions with diverse experts in the field, authors or curators, and virtual visits to other museums. Supplemental opportunities for professional learning after Year One will offer in-person and virtual opportunities, including special invitations to attend the Museum's highly regarded public programs such as Astro Live and other special events, both live and virtual.

Year One (October 1, 2023 – September 2024): 185 participants

The first year of the project will focus on providing opportunities for teachers in New York City schools. Year One will offer two types of professional learning experiences:

- **Summer Inspiration Institute:** A five-day long in-person institute for 25 teachers, exploring inclusive pedagogies, resources highlighting the contributions of underrepresented groups to history and innovation, and community building. There will be an application of interest for participants. Recruitment will be focused on those teachers with fewer than five years of classroom experience. Teachers will be paid a stipend of \$500 for their time and attendance. Coffee and lunch will be provided daily.
- **Inspiration Academy Seminar:** A day-long in-person seminar offered twice yearly for up to 80 teachers focused on inclusive NGSS/STEM- *Science and Engineering Practices* and *Phenomena Based Learning*.

Year Two (October 1, 2024 – September 2025): 235 participants

The second year of the project will focus on providing opportunities for teachers both in New York City schools and, through leveraging remote technologies, throughout New York State. The design of the experiences will be informed by information gleaned through the previous year's cohort's Participant Perception Indicators, reflection prompts, surveys and discussions. Year Two will offer three types of professional learning experiences including:

- **The in-person Summer Inspiration Institute**
- **The Inspiration Academy Seminar**
- **Virtual Inspiration Institute**, a series of five (5), two-hour long workshops delivered remotely. There will be an application of interest for participants and recruitment will be focused on those teachers with fewer than five years of classroom experience. Target number of participants enrolled in the Virtual Summer Academy is a cohort of 50. Teachers will be paid a stipend of \$300 for their time and attendance.

Year Three (October 1, 2024 – September 2025): 235 participants

The third year of the project will focus on providing opportunities for teachers from New York City schools and New York State, building on the previous two years, informed through evaluative data and feedback, and solidifying the model for future iterations. Year Three will offer the same professional learning experiences as previous years as well as opportunities to connect with other cultural institutions and museums in the virtual realm through virtual “field trips” and other collaborations. Potential partners include; NASA Visitor Centers; California Institute of Science; Museum of Flight, Seattle; National Air & Space Museum at Udvar Hazy D.C.; National Museum of African American History & Culture.

What are the risks to the project and how will you mitigate them?

Given the level of stress and exhaustion reported by teachers, as well as being overwhelmed, there is a risk of the teachers who need the support most not knowing about or feeling unable to take advantage of the opportunity. To mitigate this potential we intend to reach out to and work with the New York City Department of Education as well as schools of education known for graduating BIPOC teachers such as City University of New York schools of Education and the Metropolitan College of New York to disseminate information about the opportunity. We will contact the United Federation of Teachers school-based Teacher Centers to align efforts and share information. We will list the opportunity in the New York City public school system’s principal’s weekly eblast, and we will leverage our existing relationships with teachers we have served through National Endowment for the Humanities teacher institutes and New York City P-Credit offerings to spread the word to their newer colleagues. As an extra incentive, all teacher participants in New York State schools will be eligible to receive CTLE professional development credits and to honor the cohort participant’s time as partners in the evaluative process, they will also receive a small stipend.

Who will plan, implement, and manage your project?

The Museum’s Education staff has expertise in education, history, STEM subjects and supporting learners with disabilities. Education staff members have experience delivering in-person and virtual professional development, including several NEH-supported summer teacher institutes. In addition, our specially trained Access team has decades of experience and expertise lowering barriers for all learners, including those with physical, developmental or cognitive disabilities, especially important with collaborative team teaching settings. Team members with particular oversight of the development and delivery of *Inspiration Academy* programming are:

Gerrie Bay Hall, MA, Director of Lifelong Learning has worked in the museum education field for over 16 years. She led the school and teacher program staff in the details of implementing all NEH Summer Institutes for Teachers at the Intrepid Museum, including the highly successful switch in summer 2020 from a planned on-site program to an entirely virtual two-week experience. She will work with Jonathan Milard to finalize programming, co-teach, aid with outreach and reporting for the *Inspiration Academy*.

Jonathan Milard, MA, Manager of School & Teacher Engagement, is proficient in teaching in both formal and informal settings and currently serves on the Museum’s DEAI Committee. He has extensive experience creating inquiry driven professional learning experiences and is one of the key personnel on NEH and IMLS grants awarded previously to the Museum. Jonathan will act as the project manager, coordinating materials needs, providing direct implementation of *Inspiration Academy* experiences and serve as the main contact for participating teachers.

Lynda Kennedy, PhD, Vice President of Education and Evaluation, has devoted her career to developing and implementing professional development experiences for teachers as well as pre-service courses in creating culturally-responsive classrooms through the arts. Dr. Kennedy has extensive experience in implementing federally funded grant projects, including several Teaching American History grants and National Endowment for

the Humanities Institutes. She will provide high level oversight for the administration of the *Inspiration Academy* and guide tracking of outcomes.

What time, financial, personnel, and other resources will you need to carry out the activities?

Developing and implementing this project has implications for Education staff as time will need to be dedicated to project management, partnership coordination and teacher outreach. Senior educators will be supporting the programming as will Collections staff and Curators as experts. IT support will be needed for blended events. Guest speakers will require stipends. In order to create a respectful environment, catering will be provided, and to respect teachers as professionals working in their limited off time, stipends will need to be offered. Since our project is focused on piloting the program, IMLS support will be primarily allocated to teachers’ stipends and other direct costs associated with the delivery of the *Academy*, and only a small portion will be allocated towards staff if the project is funded. The majority of the staff effort, which is substantial based on our prior expertise delivering professional development opportunities, is applied towards the required match. To offset these costs, the Museum’s Institutional Advancement department will focus their effort on identifying and cultivating foundation supporters, and identifying new potential funding opportunities from the City and State funding agencies.

How will you track your progress toward achieving your intended results?

Under the guidance of the VP of Education & Evaluation, the project team will conduct a number of formative and summative evaluations to assess quality, participant satisfaction and inform iterations of experiences. Participant Perception Indicators (PPIs), given during institutes, will measure content mastery and increased confidence in applying inclusive practices, the C3 Framework and NGSS standards. Follow-up data collection will be conducted to measure relationship building with the Museum (i.e.: class visits, use of online materials etc.), among peer colleagues, resource use and sharing, and peer communication. Artifacts such as teacher-created work, digital communications, and guided reflections will be collected. The project will also aim to track teachers who stay in the profession past the initial five year mark and compare those to the state and national standards.

Intended result	Data source(s)
Content/skill mastery	<ul style="list-style-type: none"> - Short surveys - Teacher created work - PPIs
Creation of a Professional Learning Community	<ul style="list-style-type: none"> - Digital communications - Guided reflections - Class visits - Resource use and sharing
Teacher persistence	<ul style="list-style-type: none"> - Periodic check-ins post-institute for project duration

The project team will meet monthly to review achieved and upcoming milestones. Staffing effort documentation will be reviewed twice annually and budget adherence each quarter, along with the Finance and Government Grants team.

Project Results

What are your project’s intended results and how will they address the need, problem, or challenge you have identified? How will the knowledge, skills, behaviors, and/or attitudes of a target group change as a result of this project?

The attrition of early career teachers, particularly BIPOC teachers, has reached crisis proportions, affecting the student experience. The aim of the *Academy* is to ensure that new teachers will develop supportive networks of peers and have increased confidence with the integration of historical and contemporary resources amplifying

marginalized voices in history and the sciences, creating a joyful and rigorous classroom experience which encourages a sense of belonging for themselves, their peers and their students. Ultimately, our hypothesis is that this will lead to persistence past that critical five-year career mark. The *Academy* will achieve these results by targeting early career BIPOC teachers as well as early career white teachers working in primarily BIPOC schools, providing affective support and mentoring, building relationships between peers, providing targeted training, fostering professional learning communities, and establishing networks of support, all of which are proven methods of teacher retention.^{vii}

The *Academy* can serve as a model illustrating how museums can address teacher attrition, not only by providing resources and typical content-focused professional learning, but by also serving as a hub for a Professional Learning Community where teachers are no longer isolated and where they are treated with respect as professionals. Intrepid Museum Education staff will share their process with their professional networks through their various communication valves, including conferences and webinars. Participant teachers will be invited to contribute work products from the *Academy* to the online Intrepid Learning Library as a way of crowd-sourcing inclusive lessons and making resources available to all.

What products will result from your project?

Upon completion of the project, the Museum will officially launch its *Inspiration Academy*, offering a regular schedule of professional development opportunities and resources in STEM, History and Social Studies designed to support all teachers in their early career, with a special emphasis on supporting early-career BIPOC teachers and/or teachers serving primarily BIPOC students in Title 1 Schools.

How will you sustain the benefit(s) of your project beyond the conclusion of the period of performance?

The Education Department at the Museum is deeply devoted to fostering community in the educational ecosystem. This project serves to launch and inform the development of Intrepid's *Inspiration Academy*, which will continue as a resource long after the project period. As the *Academy* completes the initial three-year cycle, Professional Learning Communities and networks formed can continue to thrive as teachers progress in their careers, facilitated by program coordinators through digital communications, invitations to events, and planned gatherings. Participants in the *Academy* will maintain their relationship with the Museum through special invitations and further opportunities for themselves and their students. The inclusion of remote instruction opens the possibility of reaching teachers across the nation as a next growth step. Fundraising efforts will continue to offer stipends for teachers (focusing on BIPOC teachers and high-need schools), but fee-based programming for schools or teachers for whom that is an option, may become part of the model. Past cohort participants, who will be further along in their careers, will be sought out as paid academic coaches, mentors, and peer support to new cohorts of teachers, continuing the formation of sustained, deep relationships with the education community.

ⁱ <https://www.pewresearch.org/fact-tank/2021/12/10/americas-public-school-teachers-are-far-less-racially-and-ethnically-diverse-than-their-students/#:~:text=Fewer%20than%20one%20in%20ten,of%20two%20or%20more%20races.>

ⁱⁱ <https://time.com/6130991/black-teachers-resigning/>

ⁱⁱⁱ <https://www.zippia.com/answers/what-percentage-of-teachers-quit-in-the-first-five-years/>

^{iv} <https://www.edweek.org/teaching-learning/why-teachers-leave-or-dont-a-look-at-the-numbers/2021/05>

^v <https://www.forbes.com/sites/taliamilgromelcott/2022/10/19/you-belong-in-stem-yes-i-mean-you/?sh=2603fe712909>

^{vi} <https://www.brookings.edu/research/the-importance-of-a-diverse-teaching-force/>

^{vii} <https://researchmap.digitalpromise.org/topics/supporting-teachers-of-color/>

