



**Museums for America
Sample Application MA-10-13-0379-13
Project Category: Learning Experiences**

Museum of Photographic Arts

Amount awarded by IMLS:	\$116,752
Amount of cost share:	\$124,824

Attached are the following components excerpted from the original application.

- Abstract
- Narrative
- Schedule of Completion

The Museum of Photographic Arts (MOPA) proposes to undertake a two-year initiative titled *Audience-Driven Innovation and Learning* to develop future-thinking learning experiences that are designed to meet the changing needs and desires of our audiences. This project unites the cultural resources of MOPA with the technological expertise of the Balboa Park Online Collaborative (BPOC) and the deep community roots of the Media Arts Center San Diego (MACSD).

Audience-Driven Innovation and Learning responds to the IMLS's strategic priority to support **Learning Experiences** and explores some of the most compelling challenges facing MOPA and other cultural institutions across the nation including: changing demographics, declining participation in traditional arts programming among younger audiences, changing audience expectations, and rapid changes in technology.

This project will address these challenges by engaging teens and young adults from diverse and underserved neighborhoods in San Diego in a dynamic process of audience analysis and engagement including data analysis, audience surveys, focus groups, prototype development and testing, deployment of new technologies, and user evaluation. The initiative will couple digital technology along with traditional education models to create learning experiences that are relevant, interactive and learner-centric. The 2-year project encompasses three phases:

Phase 1 - Discovery [December 2013 – December 2014]

Phase 2 – Design and Testing [January 2014 – August 2014]

Phase 3 – Reporting and Deployment [September 2014 - November 2015]

The project design is intentionally **process-driven**, rather than project/product driven. Intended results of the initiative are to:

1. Connect MOPA to new and diverse audiences, especially teens and emerging adults, to reflect the changing demographics of San Diego County.
2. Design and prototype new learning experiences for the target audience utilizing both new technologies and traditional education models.
3. Establish a culture within the museum that supports the ongoing creation of meaningful approaches to audience engagement and new technology

Progress will be documented through the results of the community surveys and focus groups, participation data from the Teen Exploratory Groups, results of user-testing of the prototype, and a final project evaluation conducted by a professional evaluation consultant.

Audience Driven Innovation and Education boldly asks expansive questions about what our community needs and wants in learning experiences, expands opportunities for audiences to design and test meaningful interactivity with the arts, and provides youth a leadership role in the development of new ideas for community engagement with the arts. Additionally, this effort will contribute to the national dialogue on how museums and educators adapt to changing models within learning and technology.

1. Project Justification:

The Museum of Photographic Arts (MOPA) proposes to undertake a two-year initiative titled *Audience-Driven Innovation and Learning* to develop future-thinking learning experiences that are designed to meet the changing needs and desires of our audiences. MOPA will accomplish this effort by engaging teens and young adults from diverse and underserved neighborhoods in San Diego in a dynamic process of audience analysis, prototype testing, and technology development. This initiative will couple digital technology along with traditional education models to create learning experiences that are relevant, interactive and learner-centric.

Community Needs and Challenges: As the digital age reframes the meaning and use of photography, as well as how museums interact with audiences, MOPA is fully engaged with this new paradigm. *Audience-Driven Innovation and Learning* responds to the IMLS's strategic priority to support **Learning Experiences** and explores some of the most compelling challenges facing MOPA and other cultural institutions across the nation, including:

Changing Demographics

- San Diego County has become more racially diverse, with both Hispanic and Asian populations seeing dramatic growth, representing 32% and 11% of the county's population respectively. Asians, Latinos and African-Americans together represent the majority population in the county for the first time in history.¹
- This diversity is predominantly in the younger population. Fewer than 30 percent of San Diegans under age 18 identified themselves as white and not Latino in the 2010 Census while more than half of San Diegans over age 45 did.²

Relevance Gap

- Young adults, Latinos, Asian Americans and low-income residents within California are less likely to participate in the arts.³

Changing Audience Expectations

- Increasingly, visitors expect a seamless experience across devices as well as to be able to work, study, and connect with their social networks wherever and whenever they want to.⁴
- Audiences are seeking experiences that are active, immersive, and social.
- Visitors and program participants are surrounded by digital devices that meet their needs and desires for knowledge and understanding, challenging the traditional model of the museum curator or museum educator as expert.

Rapid Change in Technology

- The rapid pace of technological change and the intensive investment required to adapt to new platforms makes it difficult to navigate how to best share our cultural and learning resources with audiences.

MOPA has experimented with a variety of technologies that are useful for reaching audiences: touch interactive devices such as iPads and touchtables, mobile devices with web-based content, multimedia presentations of audio and video materials, and the MOPA website. Significant challenges remain, however, in how to develop sustainable models for sharing content across multiple platforms and to identify the best ways to deliver and reach audiences within these platforms.

¹ Keenan, Kyle. (2011, October 21) "Racial Diversity's Impact on San Diego Politics," *Voice of San Diego*. Retrieved from <http://www.voiceofsandiego.com>

² *ibid.*

³ Markusen Economic Research, commissioned by The James Irvine Foundation. "Arts, Culture and Californians." September 2011.

⁴ NMC Horizon Project Preview, 2012 Museum Edition, pg. 4-5. Retrieved from <http://www.nmc.org>

Target Audience: The target audience for the project is teens (ages 13-19) and young adults (ages 18-30) from diverse and underserved communities in San Diego. Specifically, the community assessment and technology testing will be concentrated in the neighborhoods of City Heights, Logan Heights, Southeast San Diego, and North Park, which have high concentrations of low-income and racially diverse residents (Latino, African-American, Southeast Asian, and African refugees). These communities represent some of the fastest growing demographic groups in San Diego as well as audiences that traditionally have lower participation rates in museum programming.

In recent years, MOPA has employed several methods to engage audiences in the development of new technology. In 2010, MOPA participated in a large-scale survey of 1,000 visitors, providing information on visitor demographics and motivations. Additionally, MOPA involved audiences extensively in prototype testing during the development of its multi-touch table interface in the galleries. Staff routinely observe and seek feedback from visitors as they use new technologies within the gallery. This experience has demonstrated that our audiences desire and appreciate access to the museum's resources and expertise. Our experience has also strongly reinforced the critical need to involve audiences early in the design and development process. *Audience-Driven Innovation and Learning* will expand these opportunities for audiences to design and test meaningful interactivity that responds to what they want to know and experience.

Further, MOPA has found that involving teens in the museum process leads them to become more invested because their work contributes to a meaningful place and experience. As digital natives, teens and young adults have the knowledge and experience to better understand how to best deliver content and learning experiences to their community. This initiative will provide youth a leadership role in the research, development and deployment of new ideas for community engagement with the arts.

Intended Results: *Audience Driven Innovation and Education* boldly asks expansive questions about what our community needs and wants in learning experiences, places significant control of the development of new strategies in the hands of young leaders, and forms deep collaborative relationships. The project design is intentionally **process-driven**, rather than project/product driven.

The intended results of the initiative are to:

1. Connect MOPA to new and diverse audiences, especially teens and emerging adults, to reflect the changing demographics of San Diego County.
2. Design and prototype new learning experiences for the target audience utilizing both new technologies and traditional education models.
3. Establish a culture within the museum that supports the ongoing creation of meaningful approaches to audience engagement and new technology

Advancing the Strategic Plan: At its core MOPA is a learning institution. The current strategic plan for 2013-2016 envisions the museum as a vibrant and future-thinking Center for Visual Learning. This initiative will advance in two of the strategic priorities within the plan: **Lifelong Learning** and **Technology Innovation**. This project encompasses many of the tactics planned within these areas, including a comprehensive audience analysis, developing and testing new technologies for audience engagement, increasing access to the museum's educational and cultural resources, and forging new partnerships with community organization to offer learning opportunities.

2. Project Work Plan: Key elements of the project work plan include:

Teen Exploratory Group: Working in partnership with Media Arts Center San Diego (MACSD), MOPA will form a Teen Exploratory Group of youth leaders, ages 15-19. Teen leaders will be selected from advanced participants in MACSD's Teen Producer Project and will have received technical training in technology and media production. During this initiative, MOPA and MACSD will facilitate a total of five courses of approximately 10 sessions per course, with an estimated five to ten teens participating in each course. Youth will be encouraged to participate across multiple courses and new participants will also be welcome to join as each course begins. The groups will meet after school and/or on weekends at both MOPA and MACSD facilities. Teen leaders will receive extensive staff support and training, and will receive a stipend for their efforts.

Over the course of the project, youth will engage in a multi-stage process of audience analysis and engagement including data analysis, audience surveys, focus groups, prototype development and testing, deployment of new technologies, and user evaluation.

Community Audience Analysis: An audience analysis, led by the Teen Exploratory Groups, will collect information on how audiences use digital technology, perceptions of current museums programming and education models, and what types of learning experiences they desire related to the photography.

Evaluation consultant [REDACTED] will guide the evaluation design and develop survey and focus group tools. The ARCS model developed by educational psychologist John Keller⁵ will provide a framework to guide the research and assessment. The central question to be explored is: *Does the learning experience at MOPA motivate people to visit and engage with what we do?* The ARCS model asserts that for education to reach an audience it must hold the learner's attention, be relevant to them, make them feel confident, and provide satisfaction with the experience. What parts of MOPA's exhibitions and programs meet those requirements, especially to new and traditionally underserved audiences? Which ones don't? How can technology be integrated within the museum experience to further stimulate learner motivation?

The research will take place at public libraries and other appropriate community centers, building upon relationships already established by MOPA and MACSD as well as the peer connections of the teen leaders. Neighborhoods and community sites identified for inclusion include:

- Logan Heights (Site: Barrio Logan College Institute or Logan Heights Library)
- Southeast San Diego (Site: Jacobs Center for Neighborhood Innovation/Market Creek Plaza)
- City Heights (Site: Mid City Can)
- North Park (site: Media Arts Center San Diego)

The data from these efforts will be consolidated, reviewed, and used to design and prototype ideas.

Strategic learning design and prototyping: With a better understanding of the target community, the Teen Exploratory Groups, led by the Balboa Park Online Collaborative, will design ideas and strategies for new and enhanced learning experiences. These ideas will be developed into a series of prototypes that will be user-tested by community members to assess engagement and learning.

Educational technology strategy development: MOPA staff and evaluation consultant [REDACTED]

⁵ "Motivational Design for Learning and Performance: The ARCS Model Approach," John M. Keller, Springer, 2010.

will prepare a project report with a summary of data and recommendations for the implementation of educational technology. This analysis will guide the museum's long-term strategies to address our audiences' learning needs, as well as how to continually engage audiences in the development of meaningful learning experiences.

Project Leadership: MOPA is uniquely prepared and positioned to lead this project, building upon an established record of innovation and experimentation. In the last two years MOPA has made great strides towards integrating technology into our exhibitions and programs. Visitors to MOPA's galleries sent feedback via text message to young artists featured in the annual youth exhibition, viewed interviews with artists/scholars by scanning QR codes, discovered creative interpretations of art through audio and video presentations accessible on iPads and multimedia devices in the gallery, and gathered around a multi-touch table (the first in Balboa Park) to view and select works for our first crowd-sourced exhibition.

These and other projects have strengthened MOPA's internal capacity to manage complex technology projects and forged strong collaborations with partner organizations. They provided real world experience with balancing audience needs and expectations, internal priorities and costs, technological complexity, and the rapid pace of change. We have experienced first-hand the difficulty of working on projects initiated with a pre-determined technology interface that may quickly become outdated, require intense modifications, or simply not fit the audience.

This project will be managed by two members of the Education Department:

- [REDACTED], *Director of Education and Public Programs*, will oversee the museum-wide effort to integrate technology and adapt educational strategies to more interactive and learner-centric models. Prior to assuming his current position, [REDACTED] managed MOPA's technology and senior outreach initiatives for two years, serving a dual role as Digital Interpretation Manager and Lifespan Learning Manager. [REDACTED] holds a degree in Educational Technology from San Diego State University and his skillset is focused on developing educational programs and resources that meet audience needs through careful design and delivery.
- [REDACTED], *Digital Interpretation Manager*, will conduct research and analysis to better understand our audiences, develop prototypes for educational content delivery, and oversee the evaluation of these efforts. [REDACTED] graduated with a B.S. in Cognitive Science from UC San Diego, where his focus was in human-computer interaction. He began working with MOPA while an undergraduate student at UC San Diego during a partnership with the Calit2 PRIME program and was subsequently hired as a contract staff member to complete development of the touch table interface for *Soapbox! The Audience Speaks*.

Additionally, this project unites the cultural resources of MOPA with the technological expertise of the Balboa Park Online Collaborative and the deep community roots of the Media Arts Center San Diego:

- *Balboa Park Online Collaborative (BPOC)*: BPOC fosters a culture of innovation and collaboration among nonprofit organizations through technology. BPOC will serve as a formal partner to provide technical consulting, prototype development, and project development support. MOPA and BPOC have worked successfully on numerous technology projects involving in-gallery, online, and mobile applications.
- *Media Arts Center San Diego (MACSD)*: MACSD will also serve as a formal partner, leveraging their 10+ years experience with community engagement and media production. One of their

signature programs, Teen Producers Project, trains underserved teens in the art of media. The program strives to teach teens how to become active leaders in their community, while promoting self-esteem and leadership through self-expression.

When and in what sequence will your activities occur?

Phase 1 - Discovery [December 2013 – December 2014]: During Phase 1, MOPA and MACSD will form the Teen Exploratory Groups. Three courses (10 sessions each) will focus on gathering data from the target communities. This will include analysis of existing data and current practices from MOPA and other organizations, visitor surveys, and focus group meetings with diverse audiences.

Phase 2 – Design and Testing [January 2014 – August 2014]: Using data from Phase 1, the Teen Exploratory Groups and Digital Interpretation Manager will new and emerging technologies to suggest ways to utilize them to creating engaging learning experiences. This will include prototyping and testing new ideas in collaboration with the Balboa Park Online Collaborative. The teens will test these prototypes with visitors and community members.

Phase 3 – Reporting and Deployment [September 2014 - November 2015]: In the final phase, all data from the community assessment and prototype testing will be consolidated into a report that be used to guide future technology projects and implementation. The Digital Interpretation Manager will begin to implement strategies developed from Phase 2 and evaluate the visitor experience with these technologies to measure success. Additionally, the Manager will create a strategic framework for the ongoing development of new technologies at MOPA.

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

The project includes support for key staff positions in order to build, sustain and expand our efforts to provide dynamic learning experiences to our audiences. These include the Director of Education and Public Programs, Collections Manager, Communications Manager, and the Digital Interpretation Manager, a specialized position that leads museum-wide technology development and audience engagement projects. The project also requires the program supplies and technology equipment necessary to implement the audience analysis, prototype design, and user testing.

The project will thrive with the partnership and expertise of the Balboa Park Online Collaborative. Additionally, in order to successfully reach and engage with youth in the target communities, the project establishes a strong partnership with Media Arts Center San Diego, an organization with more than a decade of experience engaging with youth in these communities. Additionally, an educational program evaluator, [REDACTED] will be hired to guide the community assessment process and document the project results.

What resources will your institution contribute to the project?

Staffing: MOPA will contribute the time and expertise of staff members including the Director of Education and Public Programs, Digital Interpretation Manager, Collections Manager, and Communications Manager.

Existing Technology: MOPA brings to the project a variety of existing technology equipment and platforms, including iPads, a 40” multitouch table, the museum’s robust website, multimedia presentation devices such as digital media players and displays, and other mobile platforms such as smartphones.

Permanent Collection: Museum’s collection encompasses the entire history of photography, as well as materials and documents related to the history and processes of the medium. Holdings include nearly

7,000 photographs by 700 artists as well as 20,000 items in the Edmund L. and Nancy K. Dubois library. Over 95% of the photography collection has been digitized. The collection serves as a rich source of content for digital media projects.

Arts Education Curriculum and Resources: MOPA is a leader in arts education and brings a wealth of resources relevant to providing high-quality arts education to youth and schools. This includes the online learning center: www.carearts.org.

Community Partnerships: MOPA has a history of working with partners who are located in the communities we strive to serve. These partners offer access to groups and individuals who understand the cultures and perspectives of these communities. These connections allow MOPA to leverage existing networks rather than develop them on our own.

Tracking Progress: Evaluation consultant [REDACTED] will guide the design of evaluation tools, data collection, and reporting. For Phase I of the project, progress will be documented through the results of the surveys and focus groups, as well as participation data from the Teen Exploratory Groups. Through Phase II the results of user-testing the prototypes and the documents created as strategies will be the form of measurement. In Phase III the evaluator will work with the staff to develop learning strategies for technology, as well as provide a report of the overall results for future reference and sharing with the field.

Sharing Results: MOPA hopes that the results of this project will influence other museums and educational programs through the approach and the results. MOPA's blog and social media posts will provide a platform for building public awareness of our efforts. The Digital Interpretation Manager and members of the Teen Exploratory Groups will be tasked with making regular updates about what we are doing and what we are finding.

When the project is complete, MOPA, BPOC and MACSD will actively seek opportunities to share the methodology, data collected, and strategies and best practices culled from the project evaluation at professional conferences and make them available on the website. MOPA will also pursue opportunities to share what is learned with K-12 schools and other non-profit educational organizations through presentations and workshops.

Additionally, this project will take place during the 100th Anniversary celebration of the 1915 Panama California Exposition in Balboa Park, the nation's largest urban cultural park and MOPA's home for the past 30 years. The 2015 Celebration begins December 31, 2014 and runs through December 31, 2015, providing an ideal platform from which MOPA will showcase leading-edge technologies and strategies to engage audiences.

Explanation of Budget Deficits: In the Program Information attachment, the museum shows budget deficits in two of the recently completed fiscal years. In FY09-10, loss is mainly due to depreciation expense of \$240,838 and expenses related to the release of temporarily restricted assets. In FY10-11, loss is attributable to depreciation expense of \$241,231 and expenses related to the release of temporarily restricted assets.

3. Project Results

What knowledge, skills, behaviors and/or attitudes do you expect to change and among whom?

For audiences that already visit, participate, and value the museum we want to see:

- A change the feeling that MOPA is a contemporary learning experience, and
- An increase in the feeling that MOPA helps them learn what they want to learn.

For audiences that do not already come to the museum we would like to see the above outcomes, as well as:

- A growth in how often they visit or participate, and
- An increase in their value of the museum as a learning and recreational space.

For the museum we would like to see:

- A change in attitude towards the needs of the visitors and program participants being met first,
- An approach to educational program and exhibition design that is audience-focused and learner-centric, and
- Application of long-term strategies for using technology in educational programs and exhibitions

Key performance measures will include:

- Surveys with 500 audience members and 8-10 focus groups with community members in the target communities;
- A comprehensive Audience Analysis report;
- Documentation of prototype testing and user evaluation;
- Documentation of technologies deployed during the project and participation metrics; and
- A strategic framework for the ongoing development and integration of new technologies.

Value to the Field: This effort will contribute to the national dialogue on how museums and educators adapt to changing models within learning and technology. By putting the audiences first, and using the technology to give them choice and control, this project will serve as an example of how to adapt education programs to contemporary audiences and plan for future changes. We believe the results of the project will provide guidance and support to peer organizations in their approaches to audiences, technology, and education.

Sustainability: The integration of technology into the learning experience is a central part of the MOPA's long-term strategy and we are fully prepared to develop and invest the resources necessary for sustained effort and progress. The audience analysis, as well as the community partnerships forged with the Teen Exploratory Groups and target communities, will open a dynamic and sustainable relationship between the MOPA and new audiences. The results of this effort will shape the development of the museum's educational strategies for years to come and provide an ongoing roadmap for technology integration.

