

POWRR Professional Development Institutes for Digital Preservation

ABSTRACT

Northern Illinois University Libraries is the lead applicant for this proposal. The Historically Black Colleges and Universities Library Alliance, the Sustainable Heritage Network, the Appalachian College Association, and the American Association for State and Local History will serve as collaborating organizations. The proposed project will provide information professionals with an improved awareness of and skills relating to the standards, processes and tools used to curate and preserve digital materials. It will provide five two-day institute events in a 24-month time frame (July, 2017 – June, 2019), at no charge, with financial assistance for travel and accommodations available to participants showing need.

The project addresses an intended audience of information professionals employed at medium-sized and smaller institutions lacking large financial resources who seek to curate and preserve digital materials, including resources digitized from analog formats and born-digital items. The project's emphasis on building these practitioners' awareness of and skills relating to the curation and preservation of digital materials will allow them to enhance their institutions' capacity for these activities, which will in turn address many communities' need for access to a secure, well-documented and readily disseminated historical and cultural record. It will especially address the needs of communities served by non-elite institutions, including ethnically and geographically-defined populations that have often struggled to preserve and disseminate their unique materials, in part due to a lack of financial resources and available expertise.

Information professionals attending project events will benefit from outcomes including an expanded familiarity with the standards, processes and tools used to curate and preserve digital materials; increased skill in the operation of specific open-source tools useful in the curation and preservation of digital materials; new facility in assembling a set of tools and practices into a preservation workflow attuned to their institution's existing processes and activities while recognizing its strengths and weaknesses; increased awareness that the curation and preservation of digital materials can be a matter of building enhanced capacity in an incremental manner; and confidence in addressing a challenge that many presently perceive as dauntingly complex. 150 individuals, each representing a single institution, will benefit from the program.

POWRR Professional Development Institutes for Digital Preservation: Narrative

Statement of Need

This proposal addresses cultural heritage institutions and their information professionals' need for improved awareness of and skills relating to the standards, processes and tools used to curate and preserve digital materials. It focuses on several specific goals set out in the Curating Collections category of the Laura Bush 21st Century Librarian Program's *FY 17 Notice of Funding Opportunity*. It posits that while librarians and archivists may be aware of the pressing need to curate and preserve digital materials and the complex standards involved, they often lack familiarity with the best practices and wide array of tools that can help them to plan and initiate a local workflow, and an opportunity to interact with a cohort of practitioners with similar interests who are facing similar challenges. This is especially true of practitioners employed at non-elite institutions lacking the large financial resources necessary to maintain even a moderately robust technology infrastructure and support team and keep staff members abreast of new developments in this rapidly-changing field. The 2015 *IMLS Focus: The National Digital Platform* report recognizes that suitable training in digital library skills, including those pertaining to digital curation and preservation activities, remains in short supply, especially for this group of practitioners. (IMLS National Digital Platform, 2015, 10)

This proposal seeks to develop and present five two-day institute events. In each, 30 participants will familiarize themselves with best practices and a number of available tools; work with institute instructors to create the foundation of a local digital curation and preservation workflow; and identify potential solution models comprised of a tool or tools best suited to their institution's technical infrastructure, availability of resources, staff members' technical skills sets and the nature of their digital collections. The proposed events will especially benefit librarians and archivists working at medium-sized and smaller, under-resourced institutions, including those serving historically marginalized groups. Project team members will solicit and review application materials from potential participants in order to insure that information professionals working at these institutions make up as large a portion of the participant group as is possible. All attendees will participate free of charge, and representatives of institutions showing need may be awarded travel stipends.

The proposed institutes represent an extension of the award-winning [Digital POWRR Project](#) at Northern Illinois University Libraries (NIUL) (2012-present). It began with an Institute for Museum and Library Services-funded study of digital preservation challenges and potential solution models at medium-sized and smaller institutions with fewer resources, be they technical, financial, or staffing. In the course of disseminating project results, project team members developed a one-day workshop for members of their target audience. In 2014, the project received National Endowment for the Humanities funding for a program that has gone on to present seventeen such workshops around the United States. These workshops brought much-needed digital preservation training to 370 professionals from 221 institutions, 30 states (including Washington, DC), and 10 Native American tribes and cultural heritage institutions. The project awarded travel scholarships to 26 individuals showing a need for assistance.

Information professionals attending and evaluating past Digital POWRR workshops have emphasized that the practical, hands-on approach meets a large need. Many have also mentioned that they would have benefited

from more time to experiment with individual tools and services introduced in the workshop. (see *Supporting Document 1* for data) Members of the Digital POWRR team noticed that a number of practitioners from institutions where advanced digital preservation activities were well underway attended the events. They often struggled to find common issues of concern with other participants, and introduced issues of little or no interest to them. This proposal addresses the above concerns by using an application process to insure that a group of practitioners drawn from the project's target audience attends each institute.

The two-day institute format proposed here will provide attendees with an experience more detailed and more customized to their institutions' specific needs than the current POWRR workshop format. It also differs from other professional development opportunities currently available in the field of digital curation and preservation, including those administered by Cornell University and the Massachusetts Institute of Technology, or DigCCurr workshops, developed at the University of North Carolina at Chapel Hill, in several ways. First, the prospective Digital POWRR institutes will emphasize more pragmatic aspects of digital preservation and curation work than the above programs, which consider the subject in more elaborate detail, and often from a more theoretical perspective. Second, they will be available at no charge, as opposed to the above programs, which charge registration fees of up to, and in some cases, over \$1000. Third, their format will allow participants to benefit from professional development activities while only incurring expenses associated with a two-day program, as opposed to the above programs, which can last as long as one week. Finally, the availability of travel scholarship funds will insure that individuals unable to pay any travel and lodging expenses will enjoy an opportunity to take part.

The proposed project will bring together a number of partner organizations. Partners will help project administrators to bring POWRR institute events to the attention of their members. They will also help project administrators to identify organizations willing to provide the meeting space needed to host an institute. The project budget includes funds for the rental of meeting facilities, if necessary. Project leaders and partners will seek to plan institutes in locations around the United States, so as to make them readily accessible to librarians and archivists situated in diverse geographical locations. Partners include the Sustainable Heritage Network (serving Native American organizations); the Historically Black Colleges and Universities Library Alliance; the Appalachian College Association; and the American Association for State and Local History. Please see *Supporting Document 2* for partner organizations' letters of endorsement and commitment.

The proposed project promises to make a significant impact in the library and archives communities. Financial support from the IMLS Laura Bush 21st Century Librarian program would allow the proposed project to provide five institute events to a total of 150 participants. Each institution will be asked to send a single representative so as to allow for the maximum number of organizations' participation, resulting in the project reaching 150 institutions.

Project Design

The proposed project seeks to provide librarians and archivists employed at medium-sized or smaller institutions lacking large financial or other resources with the following opportunities:

- To discuss the digital preservation process, emphasizing that it is not an either/or proposition. Rather, it is something in which incremental progress can be made, as seen in the National Digital Stewardship

Alliance's Levels of Preservation. (see <http://ndsa.org/activities/levels-of-digital-preservation/>) In this light, participants will determine their institution's digital preservation goals in consultation with institute leaders;

- To learn about digital preservation best practices, the tools and services presently available, and how similar organizations have employed them successfully in workflows;
- To consult with institute leaders and collaborate with other participants to understand how digital preservation workflows are used in practice and how to employ one or more tools and services in a prospective workflow best suited to local conditions;
- To evaluate what factors might prevent their institution from reaching its digital preservation goals and develop strategies for overcoming them successfully;
- To learn from and engage with leaders in the field of digital preservation employed at institutions similar to their own;
- To understand that the work they do locally, adhering to common best practices, will contribute to the corpus of unique digital materials available online in association with the National Digital Platform.

In addressing these goals the project institutes will produce 150 librarians and archivists returning to their institutions benefiting from:

- Awareness of the levels of digital preservation and curation capacity that an institution might achieve, and what levels they seek in their local practice;
- Familiarity with best practices in the field, as well as leading digital preservation tools and services;
- Possession of a custom proposed digital preservation workflow, with potential tools and services, created to suit their local needs, abilities, and resources;
- Awareness of and preparation for known factors that might impede progress toward achieving their goals with strategies for addressing those factors;
- Membership in a cohort of practitioners from similar organizations to support their own efforts as well as inform the efforts of other practitioners attempting to engage in similar curation and preservation activities;
- Understanding how their local digital curation and preservation efforts can serve the larger National Digital Platform movement, particularly through the provision of unique digital materials of local/regional significance and enduring cultural value.

This proposal has grown from several assumptions. These include the assumption, borne out by the Request for Proposals informing this grant competition, that a significant number of librarians, archivists, and their institutions presently lack the knowledge, skills and experience necessary to confront the large challenges presented by the need to curate and preserve a rapidly growing set of digital materials and often feel overwhelmed by them.

It has also grown from the assumption, reinforced by participants' evaluations of past Digital POWRR workshop events, that this population may not benefit most from, nor be particularly interested in, the

thorough knowledge of the high-level principles involved in digital preservation and curation work, such as is provided by other professional development programs in the field.

It has also grown from the assumption, widely recognized in the library and archives community (see IMLS National Digital Platform, 2015, 10), that members of this group of practitioners can often bring only basic technical skills to bear on the challenge of preserving and curating digital materials.

It has grown from the assumption, once again supported by empirical data found in past workshop participants' evaluations (see *Supporting Document 1*), that this population seeks a pragmatic approach that will allow them to begin making progress toward higher levels of preservation and curation of their digital objects without hesitating because they feel that they lack the knowledge and resources necessary to make basic initial decisions or to construct a long-range, comprehensive plan that may be compromised by future technological developments in the field.

Finally, it has grown from the assumption that institutions and information professionals facing the challenge of curating and preserving digital materials can benefit from participation in a cohort of practitioners with similar interests who are facing similar challenges.

Any professional development program faces the risk that its curriculum may not engage with participants at their own skill levels or meet their specific needs. The proposed program recognizes this risk and has planned to account for it by focusing on a specific population of practitioners employed at medium-sized and smaller non-elite institutions, providing a large amount of individual and small-group discussion and consultation intended to ascertain participants' personal and institutional situations and construct plans to achieve increased levels of preservation and curation for digital materials in that context.

Professional development programs also assume the risk that participants may not successfully turn the skills and information acquired in the program into real benefits for their institution. The proposed program introduces participant accountability by the use of three and six-month follow-up surveys, which have proved effective in the preceding, NEH-funded Digital POWRR workshop program. It will also inform institute participants of currently existing communities of practice in the field of digital preservation and curation, and inform them of how they might join these groups. It will also make available a large number of resources specifically intended for practitioners at smaller, under-resourced institutions on the program website. (see *Digital Product Form* for additional details)

The proposed project will define success in several ways, including participants' increased awareness of best practices and tools in the field of digital preservation; the development of individualized plans for increasing levels of preservation and curation of digital materials at participants' institution; the implementation of local digital preservation workflows; and membership in a cohort of practitioners from similar organizations attempting to engage in similar curation and preservation activities, to the satisfaction of each participant and their employing institution. These will contribute to an increased level of confidence and incremental progress through the levels of digital preservation as described by the National Digital Stewardship Alliance.

The proposed institute events will include the following elements and activities:

Project administrators will ask individuals seeking to attend a Digital POWRR institute to complete a brief application including the following information: a description of their organization, its service community, and its available resources; the nature and extent of digital collections; their own previous training; and the specific benefits, for themselves and their institution, which they hope to gain from attendance. This information will help project staff members to select individuals from within the program's target audience, and organize them into cohorts sharing common needs, concerns and goals for institute activities.

POWRR team members will ask individuals selected to take part in an institute event to review materials originally presented in NEH-funded Digital POWRR workshops, including the NEH-funded project's online eLearning Modules 1 and 2, as well as a selected Digital Preservation Case Study (for example, see <http://files.archivists.org/pubs/CampusCaseStudies/CASE-16-MegMiner-Final.pdf>). These materials will make them familiar with basic issues and techniques necessary to insure full benefit from institute participation. POWRR team members will ask participants to provide additional details about their organization, including information about its technical infrastructure and available personnel; the nature and extent of its digital collections including (if possible) formats and storage media; existing policies and workflows related to digital preservation; and their high-level goals for digital preservation capacity. They will also ask participants to describe their institution's current capacity for digital curation and preservation by means of the NDSA Levels of Preservation chart. POWRR team members will use information assembled via these materials to create the initial framework for a customized POWRR Plan suited to each participant institution's digital preservation needs. (see *Supporting Document 3* for additional discussion and description of a POWRR Plan)

DAY ONE: Each POWRR Institute will consist of 5 cohorts with 6 participants in each cohort, with 1 Institute instructor assigned to each cohort for team-building purposes. Institute events will begin with a session of sixty-five minutes for all cohorts, discussing event logistics, as well as instruction in POWRR's emphasis on addressing digital curation and preservation challenges in an incremental manner. Institute instructors will review the stages of the digital curation lifecycle (see *Supporting Document 4* for handout), and discuss how practitioners and institutions may make tangible progress toward better digital preservation practices in discrete steps.

The group will next separate into their cohorts for initial round table discussions, sixty minutes in length, with each cohort facilitated by their assigned instructor. These discussions will allow each participant an opportunity to summarize the information gathered in their pre-requisite work (their initial POWRR Plan) verbally. Each brief summary will be followed by group discussion. This format allows each member of the cohort to discover previously unconsidered advantages and challenges in place at their specific institutions, based on the POWRR Plan summaries of their colleagues and the resulting discussions. It also allows the cohorts to begin getting to know one another. Participants will update their individual POWRR Plans with new information brought to light in the course of the round table discussion.

The cohorts will then come back together for the Expert Speaker Session, 90 minutes in length, in which an Expert Speaker in the field of digital curation and preservation speaks for fifty minutes. Topics may include the state of the field of digital preservation, new advances and/or emerging technologies, success stories, how smaller organizations can ensure that their digital content is being preserved in a way that conforms to

national standards, and/or how smaller collections feed into the larger collective known as the National Digital Platform. The following forty minutes will be devoted to cohort activities, with the Expert Speaker and 2 institute instructors facilitating the activity among the cohorts. This activity time may be devoted to further discussion of the expert's talk, the demonstration of a new tool, instruction in the implementation of national standards, etc. Please see *Resumes.pdf* for expert speakers' resumes and *Supporting Document 5* for their letters of support.

Cohorts will, following a break for lunch, begin Day 1 Module activities. 3 of the cohorts will start with the Case Study Module, while 2 of the cohorts will begin with the Technology Instruction Module. After 110 minutes, the cohorts will switch. See the Institute schedule in *Supporting Document 6* for clarification.

Day 1 POWRR Institute Modules:

Case Study Module, 110 Minutes in length, in which the Case Study Instructor (a professional from a smaller institution that has implemented a digital curation and preservation workflow), with the assistance of the Facilitator, reviews materials with 2 to 3 of the cohorts. The leader will discuss his/her institution's case study, including their use of gap analysis (identifying where their present capacities fall short of their desired situation), followed by a discussion in which participants may ask questions, identify their own institution's particular challenges and advantages, and perform initial gap analyses based on identified goals. Each participant will record relevant information on their POWRR Plan. Please see *Resumes.pdf* for Case Study Instructors' resumes and *Supporting Document 5* for their letters of support.

Technology Instruction Module, 110 minutes in length, in which the Technology Instructor, with the assistance of 2 other institute instructors, instructs 2 to 3 cohorts on the basic skills needed to curate and preserve digital collections, like reviewing the building blocks of a computer/network, understanding the basics required for deploying and working with open source tools, exploring how to acquire basic scripting/automation techniques, etc. Please see *Resumes.pdf* for Technology Instructors' resumes and *Supporting Document 5* for their letters of support.

Day One will close with a brief session for all cohorts and instructors to identify potential topics for the Day Two Roundtable Modules, and explore dinner plans, with each instructor accompanying their assigned cohort to dinner where possible.

DAY TWO: Day Two will begin with a short briefing of all cohorts on the Modules planned for the day. Each cohort will be assigned a time to attend their Consultation Module. Outside of this time, cohorts can choose to attend either the Technology Room Module or a Roundtable Module, both of which will be holding sessions, 90 minutes in length, on varying topics.

Day 2 POWRR Institute Modules:

Consultation Module, 90 minutes in length, in which one institute instructor consults with two members of a cohort about their local institutional setting as it relates to digital curation and preservation. POWRR team members will use information from participants' application and other pre-requisite materials to match them with another member of their cohort from an institution most similar to their own. Three Consultation Modules will run concurrently for a total of 3 consultants/6 participants per 90 minutes. Participant consultation will create the foundation for the creation of a local digital curation and

preservation workflow and identify potential solution models, based on an institution's technical infrastructure, availability of resources, individual technical skill set, and the nature of their digital collections. Each participant will record the consultant's recommendations and suggested resources on their POWRR Plan document.

Technology Room Module, 90 minutes in length, in which the Technology Instructor presents a tutorial on one of several digital preservation tools and services for the first several minutes of the session, and then assists participants as they engage in hands-on experimentation with specific open-source tools and technologies across the digital lifecycle on sample digital collections. Participants will work with 8-15 laptop machines provided by the Digital POWRR Project and the host institution, pre-loaded with utilities like Data Accessioner, NARA File Analyzer, Fixity, Exactly, Karen's Directory Printer, Archivematica, etc. Participants will note tools and services that they wish to test/pilot at their institution on their POWRR Plan document, along with applicable resources and support groups. Each 90 minute session will feature a different tutorial, resulting in a minimum of 5 tutorials taught throughout the day. All tutorials and other resources from the Institute will be freely available to the public. Please see the *Digital Product Form* for detail.

Roundtable Module, 90 minutes in length, in which the Facilitator oversees the discussion of one of multiple digital curation and preservation topics as identified by the cohort at the end of Day One. Potential topics include: web archiving, repository software, training volunteers, identifying/applying for potential grants, and the formalization of cohort relationships facilitating participants' shared follow-up activities. Each 90 minute session will feature a different topic, resulting in a minimum of 5 topics discussed throughout the day. If desired, cohorts can opt to cover 2 topics in the 90 minute session.

Cohorts will complete 3 modules prior to lunch and 2 modules after lunch. The POWRR Institute's closing session, sixty minutes in length, will bring all cohorts and instructors together for a discussion on available communities of practice in which cohorts can become involved, a recap of the Digital POWRR approach to digital curation and preservation, emphasizing incremental progress and the development of work flows best suited to local conditions, and institute assessment activities.

Institute evaluation activities will include formative and summative aspects. A group of three advisors, Dr. Patrice Prud'homme of Illinois State University, Aisha Haykal of the College of Charleston and Dr. Jeff Hancks of Western Illinois University will carry out formative evaluation for the project. They have served as members of the Digital POWRR team in past activities, co-authoring the project's original white paper and as instructors at NEH-funded workshops, and are very familiar with the proposed institute's larger goals and aims, but have played no role in the preparation of this proposal. They will work with Dr. Katherine Skinner of the Educopia Institute to review the proposed curriculum and suggest changes in the first few months of the project, and then suggest subsequent changes through the review of data that POWRR team members gather from participants of the first 2 Institutes, including pre- and post-tests documenting any change in participants' skill, knowledge and confidence pertaining to digital preservation activities that may occur. Please see *Resumes.pdf* for Advisors' resumes and *Supporting Document 5* for their letters of support.

The project will retain the Educopia Institute of Atlanta, GA to perform a detailed, summative evaluation of its activities as the grant period comes to a close. Please see *Resumes.pdf* for applicable resumes and *Supporting Document 7* for Educopia's Statement of Work.

POWRR team members will review participants' answers to three and six-month follow up surveys in order to evaluate their progress toward higher levels of digital curation and preservation capacity. They will use these materials in formative and summative evaluation activities as possible. Some follow-up survey materials for the final two institute events will not return to staff members until the end of the grant period.

Dr. Drew E. VandeCreek, Director of Digital Scholarship at Northern Illinois University Libraries, will serve as Principal Investigator and direct the project. Jaime L. Schumacher, Senior Director of Digital Collections and Scholarship at Northern Illinois University Libraries, will serve as co-Principal Investigator. Together they will plan and administer the project. Stacey Erdman, a POWRR team member who has served as the Technology Lead from POWRR's inception, will work as a consultant to develop the technology portion of the curriculum; manage the communications of the project via the POWRR email, social media accounts, website, and blog; and administer the POWRR Slack Channel to promote continued relationships among the POWRR cohorts. A project Graduate Assistant and an undergraduate student worker will assist them with more detailed aspects of project administration. Please see *Resumes.pdf* for the above individuals' resumes.

Institute instructors will include both co-PIs and Danielle Spalenka, former Project Director of the Digital POWRR Project's NEH-funded workshop program, for all five institute events. Digital preservation technology experts leading the Technology Modules will include: Stacey Erdman of Beloit College and Martin Kong of Chicago State University. Expert speakers will include Karl-Rainer Blumenthal of the Internet Archive; and Nick Krabbenhoef of the New York Public Library.

Experts leading the Case Study Module will include Lynne M. Thomas of Northern Illinois University; Meg Miner of Illinois Wesleyan University; Patrick Wallace of Middlebury College; and Matt Ransom of Appalachian State University. Please see *Resumes.pdf* for Case Study Instructors' resumes and *Supporting Document 5* for their letters of support.

Project activities will commence July 2017 with the planning of several elements of the proposed institutes. Initial activities include performing an environmental scan of the literature and practice in the field of digital preservation and curation, noting new contributions and practices for integration into institute curricula; adapting existing data and curricular materials developed for NEH-funded Digital POWRR workshops to the needs of the institute format, as is possible; developing new curricular materials for institutes as needed; making arrangements for sites for the first two institutes; and bringing initial institute events to the attention of the library and archives community, with special emphasis given to reaching practitioners at non-elite institutions in cooperation with partner associations and organizations.

Project leaders will host the first project institute at Northern Illinois University's Naperville, Illinois branch campus (in the Chicago, Illinois metropolitan area) in late October of 2017. An institute event in this location will allow project team members located within that metropolitan area to plan and present an institute event in a much shorter period of time than would have been required for an event at a distant location, due to the fact that they will not need to make elaborate travel arrangements for themselves. Chicago is easily accessible by several modes of transportation. Hotel accommodations and restaurants are plentiful in the area.

The second institute event will take place in late spring of 2018, in conjunction with a collaborating institution in a location readily accessible by multiple forms of transportation. As soon as an event place and date has been finalized, team members will begin to solicit requests for travel stipends, in conjunction with partner organizations, and evaluate them for awards. Approximately two months before the event date, POWRR team members will make their travel arrangements. Non-NIUL instructors and experts will make their own travel arrangements. Participants awarded travel stipends will be notified as soon as possible, and those accepting awards will submit documentation for the reimbursement of travel expenses while at the institute. Project leaders will engage in formative evaluation activities upon the completion of the first institute event.

During the winter of 2017-18 POWRR team members will work to begin making arrangements for institute events to be held in 2018-19 and finalize arrangements for the third project institute, to be held in the fall of 2018, in conjunction with a collaborating institution in a location readily accessible by multiple forms of transportation. Specific planning and administrative activities for this third event will proceed as noted above, on an appropriate timeline.

Upon the completion of the third project institute, project leaders and team members will continue planning for 2019 events, first finalizing arrangements for the fourth event, to be held in the early spring of 2019, and a fifth event in early summer 2019. Specific planning and administrative activities for these events will proceed as noted above, on an appropriate timeline, including additional formative evaluation. The Historically Black Colleges and Universities Library Alliance has committed to hosting one of the above institute events in Atlanta, GA. The other three will be scheduled with the assistance of project partner organizations and by contacting institutions that sought to host an NEH-funded Digital POWRR workshop. As of December, 2016, representatives of seven organizations and institutions, including the University of Missouri, Kansas City; Brigham Young University; California State Polytechnic University, Pomona; and Chatham University (Pittsburg, PA) have approached the Digital POWRR project team with requests for an opportunity to host a professional development event featuring project materials, but the NEH-funded project has been unable to accommodate them. Upon the completion of the final institute, project leaders will engage in summative evaluation activities with a consultant or consultants provided by Educopia Institute.

The proposed institutes will provide training and education to librarians and archivists employed at non-elite institutions lacking the large resources necessary to attend other professional development programs in the field, and/or consider the selection and implementation of sophisticated, comprehensive digital preservation service solutions, such as those provided by vendors.

This proposal requests \$249,887. No grant funds are to be used for salaries of full-time personnel at NIUL. Major budget requests include \$52,000 to compensate expert speakers, case study instructors, technology instructors, and consulting instructors for their services at the 5 two-day Institutes, as well as \$44,000 in travel stipends for representatives of institutions showing need (see *Supporting Document 8*). It also requests \$50,000 for the payment, over a period of two years, of a consultant (Stacey Erdman) to oversee the development of the Institute curriculum, including the Technology Modules, and to serve as the project's Communications Manager. Please see *Supporting Document 9* for this consultant's Statement of Work.

Project leaders and team members will track progress toward intended results by reviewing institute participants' evaluations of their event experiences and engaging in formative evaluation activities with the above-noted consultants. These processes will produce revisions of and additions to institute curricula as needed.

Project leaders and team members will share project outcomes and results in a series of reports presented to the IMLS, on the Digital POWRR Project's blog, twitter feed and web page.

Project leaders and staff members will distribute a prospective curriculum and revisions of it to representatives of partner organizations for review and work directly with them on specific areas of interest. A project Slack channel (created by Stacey Erdman) will allow participants an opportunity to share questions, concerns and discussion, as will its Twitter feed and blog.

Diversity Plan

Librarians employed at medium-sized and smaller institutions lacking large financial resources may struggle to take advantage of digital preservation and curation professional development opportunities presently available due to their registration fees and other associated costs. These practitioners and their institutions often work with historically underserved and under-represented populations, including Americans dwelling in rural or isolated areas, African-Americans, and Native Americans. In many cases these practitioners are themselves members of the ethnic group or other population that they serve. Several aspects of the proposed program's design will enable these institutions and individuals to benefit from it. First, the program will be available at little or no cost. Institute organizers will not collect a registration fee from participants. The program will also make considerable funds available to reimburse institute participants selected from a pool of individuals seeking additional assistance for at least some portion of their travel expenses. Program administrators will work with a variety of organizations representing institutions and practitioners serving these communities to identify individuals that might be unable to take part in other professional development activities related to digital preservation and curation due to cost. Individuals seeking to register for one of the proposed institutes will be asked to complete a brief application form, in which they note their institutional affiliation and its level of need, their professional credentials and experience, and describe their level of familiarity with digital curation and preservation work. Program administrators will use this information to insure that a diverse group of individuals representing institutions within the program's target audience receive invitations to attend.

National Impact

This program will impact the curation and preservation of digital collections at colleges, universities, research libraries, and archives at the national level, especially among information professionals serving historically marginalized populations who may presently lack access to reliable, affordable professional development opportunities in the field. It will enable these individuals and practitioners to curate and preserve materials in keeping with international best practices. This will in turn make their materials available to the large group of users in their local communities, the United States, and the wider world. This program will also reach localities and cultures whose collections might otherwise be under-represented across the National Digital Platform, empowering them to contribute their unique and valuable materials to it.

DIGITAL PRODUCT FORM

Introduction

The Institute of Museum and Library Services (IMLS) is committed to expanding public access to federally funded digital products (i.e., digital content, resources, assets, software, and datasets). The products you create with IMLS funding require careful stewardship to protect and enhance their value, and they should be freely and readily available for use and re-use by libraries, archives, museums, and the public. However, applying these principles to the development and management of digital products can be challenging. Because technology is dynamic and because we do not want to inhibit innovation, we do not want to prescribe set standards and practices that could become quickly outdated. Instead, we ask that you answer questions that address specific aspects of creating and managing digital products. Like all components of your IMLS application, your answers will be used by IMLS staff and by expert peer reviewers to evaluate your application, and they will be important in determining whether your project will be funded.

Instructions

You must provide answers to the questions in Part I. In addition, you must also complete at least one of the subsequent sections. If you intend to create or collect digital content, resources, or assets, complete Part II. If you intend to develop software, complete Part III. If you intend to create a dataset, complete Part IV.

PART I: Intellectual Property Rights and Permissions

A.1 What will be the intellectual property status of the digital products (content, resources, assets, software, or datasets) you intend to create? Who will hold the copyright(s)? How will you explain property rights and permissions to potential users (for example, by assigning a non-restrictive license such as BSD, GNU, MIT, or Creative Commons to the product)? Explain and justify your licensing selections.

A.2 What ownership rights will your organization assert over the new digital products and what conditions will you impose on access and use? Explain and justify any terms of access and conditions of use and detail how you will notify potential users about relevant terms or conditions.

A.3 If you will create any products that may involve privacy concerns, require obtaining permissions or rights, or raise any cultural sensitivities, describe the issues and how you plan to address them.

Part II: Projects Creating or Collecting Digital Content, Resources, or Assets

A. Creating or Collecting New Digital Content, Resources, or Assets

A.1 Describe the digital content, resources, or assets you will create or collect, the quantities of each type, and format you will use.

A.2 List the equipment, software, and supplies that you will use to create the content, resources, or assets, or the name of the service provider that will perform the work.

A.3 List all the digital file formats (e.g., XML, TIFF, MPEG) you plan to use, along with the relevant information about the appropriate quality standards (e.g., resolution, sampling rate, or pixel dimensions).

B. Workflow and Asset Maintenance/Preservation

B.1 Describe your quality control plan (i.e., how you will monitor and evaluate your workflow and products).

B.2 Describe your plan for preserving and maintaining digital assets during and after the award period of performance. Your plan may address storage systems, shared repositories, technical documentation, migration planning, and commitment of organizational funding for these purposes. Please note: You may charge the federal award before closeout for the costs of publication or sharing of research results if the costs are not incurred during the period of performance of the federal award (see 2 C.F.R. § 200.461).

C. Metadata

C.1 Describe how you will produce any and all technical, descriptive, administrative, or preservation metadata. Specify which standards you will use for the metadata structure (e.g., MARC, Dublin Core, Encoded Archival Description, PBCore, PREMIS) and metadata content (e.g., thesauri).

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

C.3 Explain what metadata sharing and/or other strategies you will use to facilitate widespread discovery and use of the digital content, resources, or assets created during your project (e.g., an API [Application Programming Interface], contributions to a digital platform, or other ways you might enable batch queries and retrieval of metadata).

D. Access and Use

D.1 Describe how you will make the digital content, resources, or assets available to the public. Include details such as the delivery strategy (e.g., openly available online, available to specified audiences) and underlying hardware/software platforms and infrastructure (e.g., specific digital repository software or leased services, accessibility via standard web browsers, requirements for special software tools in order to use the content).

D.2 Provide the name(s) and URL(s) (Uniform Resource Locator) for any examples of previous digital content, resources, or assets your organization has created.

Part III. Projects Developing Software

A. General Information

A.1 Describe the software you intend to create, including a summary of the major functions it will perform and the intended primary audience(s) it will serve.

A.2 List other existing software that wholly or partially performs the same functions, and explain how the software you intend to create is different, and justify why those differences are significant and necessary.

B. Technical Information

B.1 List the programming languages, platforms, software, or other applications you will use to create your software and explain why you chose them.

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

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

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

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

C. Access and Use

C.1 We expect applicants seeking federal funds for software to develop and release these products under open-source licenses to maximize access and promote reuse. What ownership rights will your organization assert over the software you intend to create, and what conditions will you impose on its access and use? Identify and explain the license under which you will release source code for the software you develop (e.g., BSD, GNU, or MIT software licenses). Explain and justify any prohibitive terms or conditions of use or access and detail how you will notify potential users about relevant terms and conditions.

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

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

Name of publicly accessible source code repository:

URL:

Part IV: Projects Creating Datasets

A.1 Identify the type of data you plan to collect or generate, and the purpose or intended use to which you expect it to be put. Describe the method(s) you will use and the approximate dates or intervals at which you will collect or generate it.

A.2 Does the proposed data collection or research activity require approval by any internal review panel or institutional review board (IRB)? If so, has the proposed research activity been approved? If not, what is your plan for securing approval?

A.3 Will you collect any personally identifiable information (PII), confidential information (e.g., trade secrets), or proprietary information? If so, detail the specific steps you will take to protect such information while you prepare the data files for public release (e.g., data anonymization, data suppression PII, or synthetic data).

A.4 If you will collect additional documentation, such as consent agreements, along with the data, describe plans for preserving the documentation and ensuring that its relationship to the collected data is maintained.

A.5 What methods will you use to collect or generate the data? Provide details about any technical requirements or dependencies that would be necessary for understanding, retrieving, displaying, or processing the dataset(s).

A.6 What documentation (e.g., data documentation, codebooks) will you capture or create along with the dataset(s)? Where will the documentation be stored and in what format(s)? How will you permanently associate and manage the documentation with the dataset(s) it describes?

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

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

Name of repository:

URL:

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