Digital POWRR Peer Assessment Program: Empowering Collective Evaluation and Action

Type: Laura Bush 21st Century Librarian Program: Project Grant, National Digital Infrastructures and Initiatives

Statement of Broad Need

This proposal addresses the ongoing need to provide comprehensive and meaningful professional development and training opportunities for cultural heritage practitioners relating to the skills required to curate and preserve digital materials. More specifically, this proposal seeks to create a digital stewardship-focused, assessment-based training program for practitioners. This proposal focuses on several goals set out in the National Digital Infrastructures and Initiatives category of the Laura Bush 21st Century Librarian Program's *FY 2021 Notice of Funding Opportunity*, specifically "integrating shared resources and collaborative networks for public access to and preservation of digital library content and collections at institutions of all types and sizes," and "assessing barriers to the adoption of tools and services and increasing the accessibility of content and collections to a wide range of users." This proposal posits that while librarians and archivists at institutions of all sizes are making progress on the curation of digital materials in their care, there still exists a great need to provide training opportunities to these professionals in this area. The 2018 Institute of Museum and Library Services report, *National Digital Infrastructures and Initiatives: A Report on the 2017 National Digital Platform at Three Forum* celebrated the many successes of the pioneering National Digital Stewardship Residency program, which since its inception in 2013, has focused on building the technical skills and capabilities of many early career professionals in libraries and archives. While recognizing the immense value this program has brought to the field, the report also emphasizes that there also is a pressing need for "training, mentorship, and cohort-building opportunities for mid-career professionals." (Rudersdorf et al, 6) This proposal attempts to help create a solution model for this particular continuing professional development issue, by moving beyond the limited, short term offerings typically available to professionals looking to augment their digital stewardship skills such as webinars or workshops, by creating a year long, structured, cohort-based, and supportive peer assessment program.

This program represents an extension of the award-winning Digital POWRR (Preserving digital Objects With Restricted Resources) Project, which began at Northern Illinois University in 2012. POWRR's origins are with an Institute of Museum and Library Services-funded study of how digital preservation tools and services could be leveraged at smaller institutions with fewer resources. In the course of disseminating the project's final results, team members developed a one-day workshop for members of the target audience, which was enthusiastically received. In 2015, the project received National Endowment for the Humanities funding to continue the day-long workshop, which led to 370 professionals from 221 institutions, in 30 states (including Washington, D.C.), and 10 representatives from Native American tribes receiving training. The project was also able to award travel scholarships to 26 individuals who requested assistance. A subsequent grant was awarded in 2017 from the Institute of Museum and Library Services, which allowed the team to respond directly to attendee feedback by developing a two-day professional institute event which incorporated a variety of instruction modules, hands-on technical instruction, cohort-based learning and discussion, and personal consultations for all attendees with a member of the instruction team.

This project endeavors to provide an innovative grassroots-based addition to the professional development landscape for librarians and archivists, and Digital POWRR is uniquely positioned to provide this sort of a

program. One common complaint of training programs in the field is that it is nearly impossible to keep participants engaged in an ongoing manner after the training event has occurred. Based on post-workshop evaluations conducted by POWRR, it is clear that some attendees make much better use of operationalizing the training than others do. While this could be due to a multitude of factors, it is clear that the higher the level of engagement with a training program, the stronger the results gained will be. Due to the fact that participants will be committing a significant amount of time and effort to this program, they will be remunerated with a participant award. Writing a full preservation assessment is not an insignificant endeavor, and consultants who provide preservation assessments for hire are compensated well for their services. The provision of a small “technology start-up” award directly made to each participant’s employer will provide attendees with the assurance that they can begin to execute digital preservation goals without waiting for their home institution to make room in their budget for implementation activities. This fund will also hopefully encourage applicants’ home institutions to allow attendee participation, since they will be not only gaining an employee with new skills that will directly benefit them, but will also provide them with some funds for doing this work.

Providing training on assessment procedures and practices is beneficial for practitioners, their collections, their organizations, and the profession overall. In the words of Susan Swartzburg, "it is the responsibility of every institution that holds unique collections, regardless of its size and resources, to properly care for its collection."(Swartzburg, 25) Digital preservation assessment helps to “facilitate diagnosis of where an organization stands in terms of capabilities and stages of growth and maturity.” (Maemura, 1620) Assessment helps to document the state of current practice; to identify gaps and areas in need of increased attention and resources; to identify challenges that may stand in the way of improvement; and to provide suggestions for how an organization can make changes that will result in iterative programmatic maturity. Digital preservation assessments grew out of the practice of traditional collection assessments, which chiefly focused on physical collection care concepts such as the evaluation of environmental conditions, fire detection and suppression, general disaster preparedness, security procedures, storage and handling practices, and overall collection management procedures. Depending on the types of materials held by an institution, it is not uncommon to see more focused collection assessments that are performed on specific media types, such as photographs, audio-visual materials, or realia. Digital preservation assessments, thus, are a natural outgrowth of this long standing practice, and as such, do share many commonalities. Best practice for all kinds of collection assessments include the use of an survey instrument or framework that evaluates policies, practices, and environment using an instrument of some sort, which evaluates policies, practices, processes, and resources that affect the preservation of collections.

Digital preservation assessment work also borrows concepts and procedures heavily from the information technology world, where the process of auditing systems has been in place for many years. IT auditing can focus on specific areas such as risk management, infrastructure, operations, or policies, or can take a more holistic approach and also examine the business and financial resources that support IT operations. Many digital preservation pioneers have roots within the IT world, so it’s not surprising to find that the majority of professional literature concerning digital preservation assessment work focuses on frameworks intended for audit and certification purposes, such as ISO 16363 (the *Trusted Digital Repository Checklist*), the *Data Seal of Approval*, and the *NESTOR Seal*. Achieving certification demonstrates compliance with international standards

and communicates to stakeholders that the institution is fulfilling stated responsibilities. However, certification is also an arduous and expensive process, and is simply not necessary or appropriate for every institution that stewards digital materials.

Lighter weight assessment models, such as the *NDSA Levels of Preservation*, have become immensely popular in recent years because they can be completed quickly, and are much less intimidating to smaller organizations who lack personnel steeped in the nomenclature of auditing and certification. However, some organizations find that they do not even meet Level 1 (Know your content) criteria on the *Levels*, and can become disheartened to find out that they are so far behind. The Digital Preservation Coalition's *Rapid Assessment Model (DPC-RAM)*, based on Adrian Brown's Digital Preservation Maturity Model (published in *Practical Digital Preservation: a How-to Guide for Organizations of any Size*, 2013) was released in 2019, and promises to serve as a rapid benchmarking tool appropriate for organizations of any size, and in any sector. Also released in 2019 is the Northeast Document Conservation Center's *Digital Preservation Assessment Handbook*, which contains a comprehensive framework with detailed metrics covering organizational issues, staffing, resources, policies, workflows, and technological resources. Staff also created a corresponding peer assessment handbook, which provides suggestions for how to employ and implement the framework in practice. Digital POWRR also attempted to create a lightweight assessment tool as part of the "Digital POWRR Professional Development Institutes" grant. This tool, "The POWRR Plan," weds an approachable gap analysis with the creation of a personalized action plan, helping practitioners understand how to put assessment results into practice. Institute participants emphasized in evaluations that they found the melding of assessment and action plan to be very useful: "I love the POWRR Plan idea. I often come away from workshops full of enthusiasm and ideas but unsure of how to apply them to my day-to-day work. The POWRR Plan helped solidify steps I can make towards better digital preservation strategies and left me with something to reflect on once I returned home." (McCracken, 2018) (See *Supporting Document 2* for further evaluations)

Organizations may retain the services of a consultant to perform digital collection assessments for them, and there are grant opportunities available specifically for this. However, the instruction team discovered through the process of working on POWRR Plans with attendees that this was simply a difficult bar for many organizations to clear. The majority of attendees represented organizations who do not have staff dedicated to digital preservation/curation roles, and thus often lacked familiarity with assessment techniques and benefits. Therefore, they were not in a good position to apply for a grant to help pay for the services of a consultant. Consultant fees for assessments also vary widely, and can be quite out of reach for many smaller or cash-strapped organizations. This project aims to educate participants on the value proposition that comprehensive and ongoing assessment work can provide, and to empower them to work collaboratively within their local communities of practice.

The aforementioned recently created frameworks: *NDSA Levels*, *DPC-RAM*, NEDCC's *Digital Preservation Assessment Handbook*, and the *POWRR Plan*, all represent slightly different yet complementary methods of digital preservation assessment. Rather than creating a new assessment framework from scratch, this project instead proposes utilizing these pre-existing frameworks as the basis of this peer training program. Allowing participants the time and space to complete multiple assessments of varying intensity, will provide more comprehensive and personalized feedback for them, as well as allowing the project team to compare and

contrast outcomes in a way that will better inform practices in the field. The frameworks selected have some diversity in approach and duration of involvement. The *NDSA Levels* and *DPC-RAM* can be completed quickly and independently. The NEDCC's framework is much more intensive, as it involves gathering a variety of written documentation, interviewing additional staff members involved with the digital stewardship process, and producing a full written peer assessment report. The *POWRR Plan* involves the preparation of a written case study and utilizes the *NDSA Levels* to help participants set short and long term goals. (Please see *Supporting Document 3* for a detailed description of the *POWRR Plan*) Although these are the main frameworks that the project will focus on, the project will also allow cohort facilitators the flexibility to suggest alternative assessment methods for peer pairs if they deem it necessary, based on the types of collections, institution type, and comfort level. By employing this type of plug-and-play approach, the project aims to create inclusive, approachable solutions that will promote the participation of practitioners from different skills levels, and from diverse and underrepresented backgrounds. The project also hopes to contribute to the professional research landscape by demonstrating how these frameworks stack up against one another, and what is to be gained by using them together.

The proposed project will bring together a number of partner organizations to help bring this training opportunity to those who have the greatest need for it. Partners will help circulate POWRR's "Call for Applications" announcement among their member base. They will also review applications from members with POWRR staff to help decide which members are best suited to participate in this training opportunity. Currently identified partner organizations include the Sustainable Heritage Network, the Black Metropolis Research Consortium, the Association of Hawai'i Archivists, Northwest Archivists, Inc., and Amigos Library Services. Project staff will identify the sixth partner organization once the first phase of the grant is underway. Please see *Supporting Document 5* for partner organizations' letters of endorsement and commitment.

Project Design

This proposed project seeks to create an innovative digital stewardship training program that produces lasting results, by equipping participants with the necessary knowledge and skills to evaluate and curate their digital collections in an ongoing fashion. Project goals and outcomes include the following:

- Equipping participants with a baseline knowledge of the digital preservation process, helping them to understand that preservation is not a "one and done" task, nor is it an either/or concept.
- Helping participants to understand that organizations can and should employ digital stewardship processes that are right-sized for their organization's resource level.
- Providing participants with the knowledge, skills, and abilities to confidently conduct peer assessment work, and to train others on the process after the project's conclusion. (Partner organizations can decide the best mechanism for sharing their representatives' experiences at the conclusion of the project.)
- Promoting the creation of lasting collaborative relationships, born out of pre-existing communities of practice.
- Providing participants with a supportive learning environment conducive to their success.
- Providing cohort facilitators with the opportunity to develop their instruction, consultation, and group facilitation skills, and deepen their levels of familiarity with digital preservation assessment frameworks and how they are best deployed.

- Creating an assessment toolbox, focused on the unique needs of under-resourced institutions, as well as producing an analysis of how participants employ different assessment frameworks within the project.
- Holding a publicly open virtual showcase at the conclusion of each project phase, where cohorts share their assessment results and experiences.
- A white paper summarizing the project's results, that compares and contrasts the assessments utilized, and attempts to draw some larger conclusions about common gaps in practices and impediments to progress experienced by practitioners.

Although this initiative is primarily intended to serve as a pilot of a training program, it will have research outputs as well. Project staff and participants will be making significant time commitments to this process, and as such, the POWRR team feels it is important that everyone participating in the project feels a sense of ownership by compensating them fairly for their work and contributions to research outputs. Rather than requiring participants to extend their own resources to participate, this project will allocate a $3000 participation fee to each accepted applicant. In addition, each participant's home institution will receive a small tech start-up award that can be spent on implementation activities. Due to the uncertainty represented by the current COVID-19 pandemic, this program has been designed to be delivered entirely online. Since it is not possible to gauge participant's feelings on in-person activities, no travel money has been provisioned at this time. If participants wish to conduct in-person site visits with their partners, the project will allow them to utilize a portion of their tech start-up awards for that purpose. Some of the committed partner organizations hold annual conferences or other in-person events where participants or cohorts may also be able to meet up as well.

Stacey Erdman, Digital Preservation and Curation Officer at Arizona State University, will serve as the Principal Investigator and will direct the project. Erdman served as the Technology Coordinator for all three previous POWRR grants, as well as a Consulting Instructor, and the Communication and Communities Coordinator on the most recent POWRR Institutes project. Jaime L. Schumacher, Senior Director of Digital Collections and Scholarship at Northern Illinois University Libraries, and Frances Harrell, Owner and Lead Consultant at Myriad Consulting, will serve as Project Advisors. Together they will assist the PI with planning and overseeing the project. Schumacher served as the original Director for the Digital POWRR Project in its first phase of funding from the IMLS, and as co-PI for the two subsequent grants. Harrell worked with both Erdman and Schumacher on various aspects of the NEDCC's 2016-2018 Digital Preservation Assessment project. Cohort facilitators include Danielle Spalenka, (Associate Curator of Digital Projects at The Filson Historical Society); Carol Kussman (Digital Preservation Analyst at the University of Minnesota Libraries); Kyle Henke (Digital Archivist at DePaul University Library); Sam Meister (Independent Consultant); Alexis Braun Marks (University Archivist at Eastern Michigan University); and Nick Krabbenhoeft (Digital Preservation Manager at the New York Public Library). Each cohort facilitator has previous POWRR experience as project staff or as a participant, so each is conversant with and supportive of Digital POWRR's ethos and commitment to inclusive training. Spalenka served as the former Project Director for the NEH-funded phase of the Digital POWRR Project from 2015-2017, and as a consulting instructor for the POWRR Institutes grant. Krabbenhoeft, Meister, and Henke served as instructors during the POWRR Institutes grant. Kussman and Braun Marks attended past POWRR trainings.

(Please see *Resumes.pdf* for more on staff backgrounds, and *Supporting Document 6* for letters of support and commitment)

The project's evaluative activities will include both formative and summative aspects. All evaluation will be overseen by professional library consultant, Stephanie Gerding. Gerding will review the pre and post tests created by project staff (which are intended to evaluate progress towards higher levels of digital curation knowledge), and provide feedback for improvement. She will also collect formative feedback from participants as the first training phase progresses, and will examine the results of the completed pre and post tests, documenting any change in participants' skill, knowledge and confidence pertaining to digital preservation activities that may occur. She will gather further feedback from a small focus group of participants at the end of the first phase. This information will be shared with the PI and project advisors, who will then make adjustments to the curriculum, schedule, and structure of the program if necessary. At the close of the second training phase, Gerding will gather remaining feedback and perform a detailed, summative evaluation of its activities as the grant period comes to a close, which will be included with the final report to the IMLS. (see *Resumes.pdf* for the experience that Gerding brings to the project and *Supporting Document 6* for her letter of commitment.)

The project would commence on August 1, 2021. The first five months of the grant will be devoted to administrative and general start-up activities. In August 2021, the PI will update the Digital POWRR website with details about the new program, and will start to create participant application materials that will be sent to three of the identified partner organizations who will serve as cohort sponsors for the first training phase. The application will be created in Google Forms, and will ask applicants to provide basic contact information; a short description of their organization and its service area; the nature and extent of their digital collections; their current level of familiarity with digital preservation concepts, including any previous formal training that they received; and what they hope to gain from participating in the program. The application will also contain language describing what the estimated time commitment would be for participants and their employers, including estimates about the amount of time that would need to be spent on participation, as well as making clear what benefits they would both receive due to participation.

POWRR team members will also begin working on curriculum design tasks for the project in Fall 2021, which will include updating existing curriculum materials already created and deployed by POWRR, as well as creating new materials. Three curricular areas will be covered, including digital preservation fundamentals, an overview of assessment practices, and assorted technology modules. (See *Supporting Document 4* for proposed details on the curriculum.) Also during this time period, the PI and project advisors will hold an informal orientation session for the cohort facilitators, to get them up to speed on project activities and planned timelines, and to get their input on planned curriculum components. Cohort facilitators will utilize one another for support throughout the year, and may set up regular times to talk, depending on their preferences. In October, professional trainer Stephanie Gerding will deliver formal facilitator training to all project staff, to prepare them for the task of leading and moderating groups. Also in October, the first call for participants will be released to the three phase one partner organizations to circulate among their membership. Project staff will begin to review applications as they come in, sharing them with representatives of the partner organizations for their input. Six participants per partner organization will be identified through

this collaborative process (for a total of 18 participants), and will be sent notice of their acceptance in November. Accepted participants will be given several weeks to secure final permission from their employer, and will sign a letter of commitment outlining expectations and estimated time that will need to be devoted to the project. Project staff will share application materials with cohort facilitators and allow them to choose which cohort they feel most closely aligned with.

The first training phase will commence in January 2022 and continue until December 2022. Project staff will gather the 18 participants, and three cohort facilitators for an orientation session, where participants will meet one another and their cohorts, and begin to learn about the program. They will be provided with a *POWRR Plan* document template by project staff, where they will begin to document their experiences. Staff will explain the first assignment at this time, which is to write the first portion of an institutional case study. Staff will then circulate the pre-recorded curricular modules covering digital preservation fundamentals with participants to watch on their own time. At this time, cohort facilitators will also work with their cohorts to determine monthly meeting times. The PI will also add everyone to the Digital POWRR Slack instance, so that they have an easy way to stay in contact. They will be added to various channels, including one limited to their cohort, to enable an easy way for members to stay in close contact. Cohorts will reconvene in mid-February and share the progress they have made on their case studies. Later in February, participants will attend the assessment practices curricular module. Around this time, facilitators will utilize the case studies to choose how to pair up the members of their cohort. The peer pairs will then meet and perform the *NDSA Levels* and *DPC-RAM* assessments with one another, and record their results in their respective *POWRR Plans*. Cohorts will meet and discuss how this process went, and receive feedback from their facilitator. By mid-March, facilitators will meet with peer pairs and determine if they should proceed with the NEDCC-DAT framework, or something else more suitable. Peer pairs will then begin exchanging case studies, relevant policies, workflows, and other written documentation. They will then use the DAT framework to interview one another (as well as additional staff members who play some role related to digital stewardship at their home organization) on the details of their local digital program. If participants are local and wish to perform a site visit, they may do so. Once documentation gathering and interviews are completed, the peer pairs will write their peer assessment reports. Participants will check in regularly with their cohort and facilitator during this time period. Assessment reports will be due at the end of June. Facilitators will meet with peer pairs to talk through their reports, and to discuss the report's recommendations for programmatic improvements. Based on this information, they will work together to set 3, 6, and 12 month goals.

At this point, the cohorts will move into the implementation phase of their projects. Their employer will be provided with their tech start-up fund, and they will then be able to ask project staff for feedback on the best way to utilize this money. It is envisioned that this money will largely be spent on computer software, hardware, peripherals, service trials, or outside educational training, although participants will be allowed to spend the money at their own discretion. Participants will then begin to tackle the short term goals they set in their POWRR Plans, and will continue utilizing their cohort and facilitator for advice and assistance as needed. Project staff will offer a number of technical training modules to participants in an "on demand" manner (such as the widely praised "Walk the Workflow" session, which demonstrates a number of open source digital preservation tools). As the end of the year draws to an end, they will complete their case study reports by

writing up what they were able to achieve. An informal virtual project showcase will take place in early 2023, where participants will discuss their experiences.

The second project training phase would begin in March 2023 and run until February 2024. The schedule of activities will mirror the first training phase (see the *Schedule of Completion* for detailed timeframes) unless feedback from participants and facilitators requires larger programmatic changes. Project staff will review evaluative feedback in January and February 2023 and make adjustments as needed. After the two training phases are completed, the PI and project advisors will commence work on the white paper that includes overall analysis of the project, comparisons of assessment frameworks used, and how peer assessment programs could potentially be operationalized within the field. They will also gather and edit case studies and peer assessments written by participants to include in the final white paper. Project staff will share project progress in a series of reports presented to the IMLS, on the POWRR blog, Twitter feed, and POWRR website.

Diversity Plan

POWRR's past educational offerings were successful at targeting diverse communities for inclusion, and the participation of these individuals has been integral to the success of past events. Feedback shared with project administrators, has suggested that practitioners employed at institutions unable to pay a fee or provide financial support for travel to professional development events often serve historically marginalized populations, including BIPOC populations and those located in geographically isolated locations. This led POWRR to utilize grant funding to provide travel stipends for individuals demonstrating need, who wanted to attend in-person training events. This feedback also confirmed that cultivating direct relationships with organizations representing practitioners serving or belonging themselves to these communities was the best way to ensure that the professionals most in need of this sort of training would have access to it. Experience has shown that these initiatives have allowed practitioners representing these communities to take part in POWRR events, who otherwise would not have been able to attend.

The proposed training program is directly aimed at advancing the role of underrepresented populations in cultural heritage institutions nationwide, and as such, participation by these populations is integral to the success of the project. This project would leverage pre-existing and new relationships with organizations that explicitly serve BIPOC populations in order to recruit a diverse pool of participants. These organizations include: the Sustainable Heritage Network (serving tribal libraries, archives, and museums); the Black Metropolis Research Consortium (serving cultural heritage institutions in the Chicago area that document African American and African diasporic culture); the Association of Hawai'i Archivists (serving organizations documenting the experiences of Native Hawai'ians and Pacific Islanders); Northwest Archivists, Inc. (serving a variety of populations in the Pacific Northwest, including Native Alaskans and the Asian diaspora); and Amigos Library Services, Inc. (serving the Southwest region, with many institutions primarily serving Hispanic/Latinx populations.)

Individuals seeking to apply to the program will be given the opportunity to self-identify what group(s) they represent. The application form will also ask them to note their institutional affiliation and its level of need; the types of collections they hold and what populations they serve; their professional credentials and experience; and to describe their level of familiarity with digital stewardship and preservation work. Project

administrators will use this information to ensure that a diverse group of individuals representing institutions within the program's target audience receive invitations to attend. Representatives from partner organizations will assist in the review process, and make recommendations for final approval.

The exclusive use of online learning technologies makes this program additionally accessible to practitioners employed by institutions confronting such a lack of resources that they may not be able to devote work time to travel and overnight stays. Additionally, the project will provide each participant with a $3000 participation award, with one half paid upon acceptance to the program, and the other half paid at the end of the 12 month training period. This will ensure that participants are fairly compensated for their time and efforts. Additionally, each participant's employer will receive an $870 tech start-up award, that is intended to be spent on implementation activities for this project.

Digital POWRR adapted DLF's Code of Conduct for the POWRR Institutes project and found that it helped to set a positive and inclusive tone for attendees. Although there were no violations registered with project staff, this project will create a more formal mechanism for participants to report potential violations.

Broad Impact

This project aligns with the overall goals of the Laura Bush 21st Century Librarian Program, as well as the goals set forth in its most recent Strategic Plan by helping to grow a skilled, professional workforce that fosters innovation, collaboration, and learning. It also aligns with the National Digital Infrastructures and Initiatives project category by piloting a vigorously immersive, yet accessible and equitable educational program relating to building expertise with stewarding digital collections in libraries and archives. The proposed project would represent a distinctive addition to the training landscape, as the majority of existing learning opportunities for practicing professionals focus on learning fundamentals, acquiring specific technical skills, or approach digital preservation work in a very theoretical manner. The project meets nearly all of the overarching themes identified as IMLS priorities in the 2018 NDP Forum Report, most notably collaboration, community, continuing education, preservation, and sustainability. It relies on the use of partner organizations to build trust among diverse stakeholders, which, as the report states, can "empower them to action" through skill building activities. (Rudersdorf et al*,* 11)

This project builds upon programs that have focused on providing digital preservation and stewardship training; the most notable being the National Digital Stewardship Residency (NDSR) program, which has been generously supported by the IMLS in the past. It also builds upon the recent work of the Association of Moving Image Archivists Community Archiving Workshop, which provided specialized training to library and archives professionals and their community partners; the WiLS Curating Community Collections project, which partnered emerging professionals with small cultural heritage organizations in digital stewardship focused-projects; NEDCC's "Digital Preservation Assessment Training" (DAT) project, which produced one of the assessment frameworks this project intends to utilize; and of course, the prior Digital POWRR project cycles, funded by both the IMLS and the NEH.

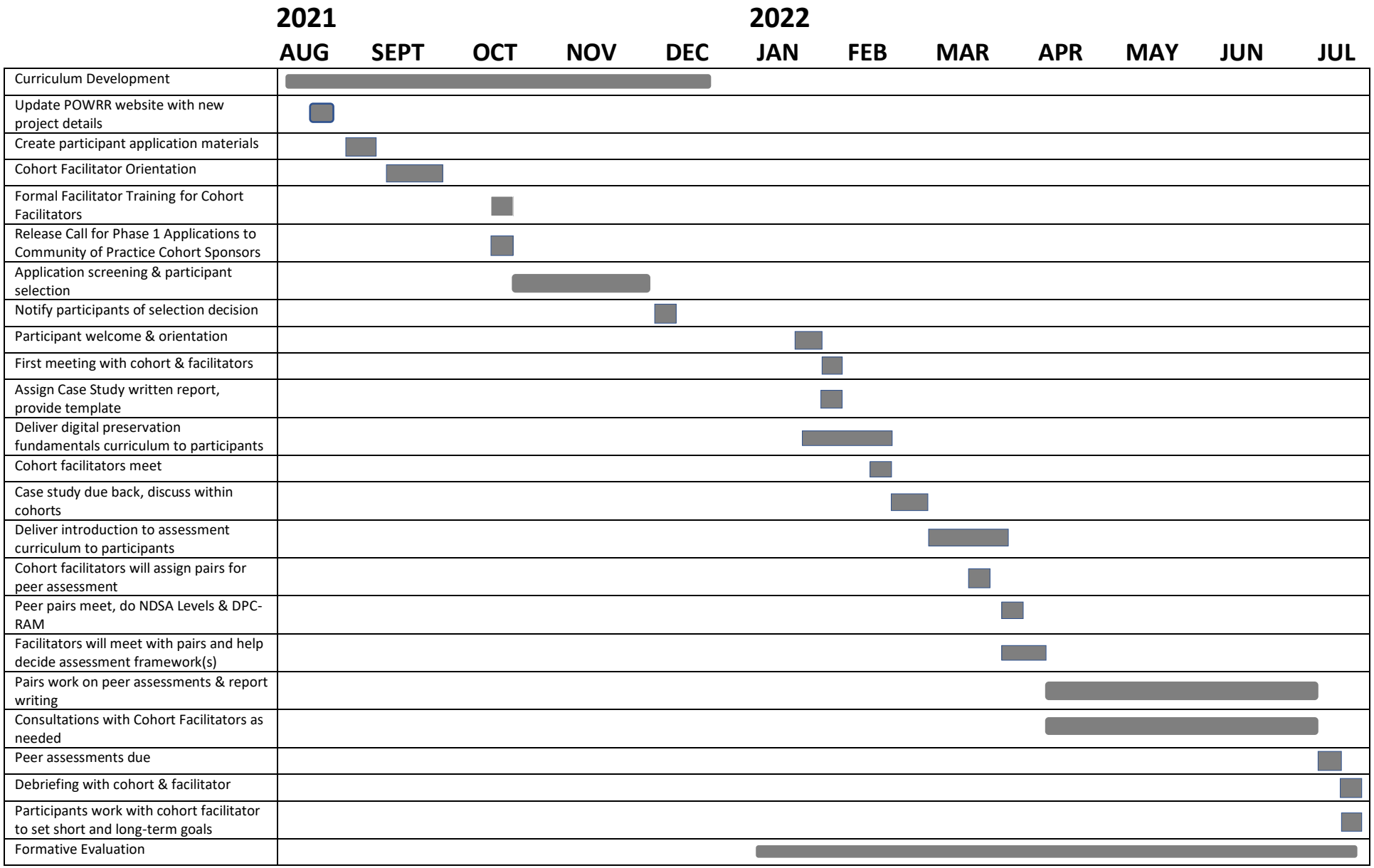
Smaller and less-resourced organizations frequently do not have the financial ability to employ staff who can be entirely focused on digital stewardship matters. Even hiring a professional to perform a digital preservation

assessment can be a costly endeavor that is out of reach for many. This project upskills professionals in multiple ways, by providing them the tools and support that they need to begin properly curating their digital materials. By learning assessment procedures, they will be able to employ these skills on an ongoing basis, whether they stay at their current job or move on to a new one. The project is intended to serve as a model that professional organizations may wish to adapt as a service provided to members. Project staff will engage in outreach discussions to membership-based professional organizations who might be potentially interested in creating a formalized peer assessment program, including National Digital Stewardship Alliance/Digital Library Federation/Council on Library and Information Resources, the Digital Preservation Coalition, the Society of American Archivists, and the American Library Association. Project staff are active within a number of professional organizations and have cultivated partnerships and relationships due to past collaborative work. Additionally, project staff will seek to disseminate project findings at national and international conferences, such as NDSA's Digital Preservation conference, iPres, and Preservation and Archiving Special Interest Group (PASIG). POWRR previously put together a highly regarded panel discussion at NDSA's 2018 conference featuring project staff and three Institute attendees. They will seek to involve project participants in similar ways at professional events so that their voices are centered and prioritized. Training participants will also be encouraged to share their experiences within their home communities of practice, and more widely within the field. Written case studies could easily be parlayed into publications in professional literature, such as SAA'S Open Access Case Studies series (https://www2.archivists.org/publications/casestudies).

Although the digital preservation field has seen tremendous leaps forward especially surrounding the solidification of standards, and the implementation of specific technologies, there is a growing consensus that persons serving in administrative roles still do not seem to understand the value proposition relating to properly resourcing digital stewardship activities within their own institutions. A recent ITHAKA report pointed to the lack of assessment metrics as one possible reason for this, stating that "there is broad recognition about the importance of assessment and outcome measures. However, there do not seem to be sufficient collaborative approaches to explore what constitutes success and how we identify and measure outcomes associated with digital preservation." (Rieger) Furthermore, many administrators tend to still view digital preservation as a purely technical undertaking and neglect the fact that preservation is indeed mission critical. A recent survey of working professionals in the field lays this fact bare, stating that "digital preservation is a maintenance-heavy undertaking that does not necessarily lend itself to the types of bureaucratic performance indicators which often sway decision-making and funding priorities." (Blumenthal et al, 10) This proposed project cannot solve these problems alone, but hopes to demonstrate the spectrum of maintenance activities that lead to programmatic maturity, as well as the value of collaborative approaches when defining progress in this realm. It also hopes to demonstrate that even small investments can help small institutions make big steps towards good practice.

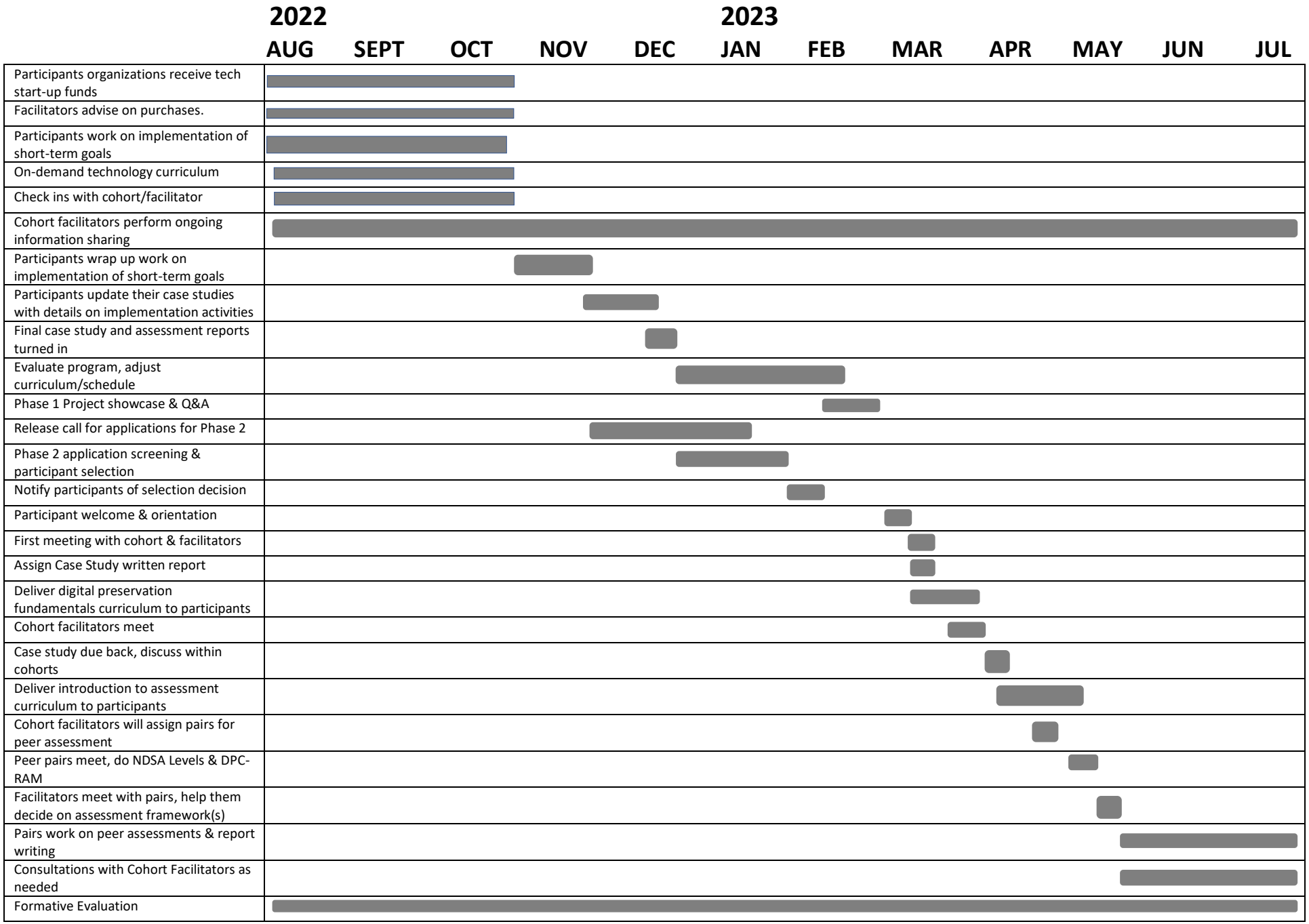
AZ Board of Regents on behalf of Arizona State University

Digital POWRR Peer Assessment Program: Empowering Collective Evaluation and Action – Schedule of Completion



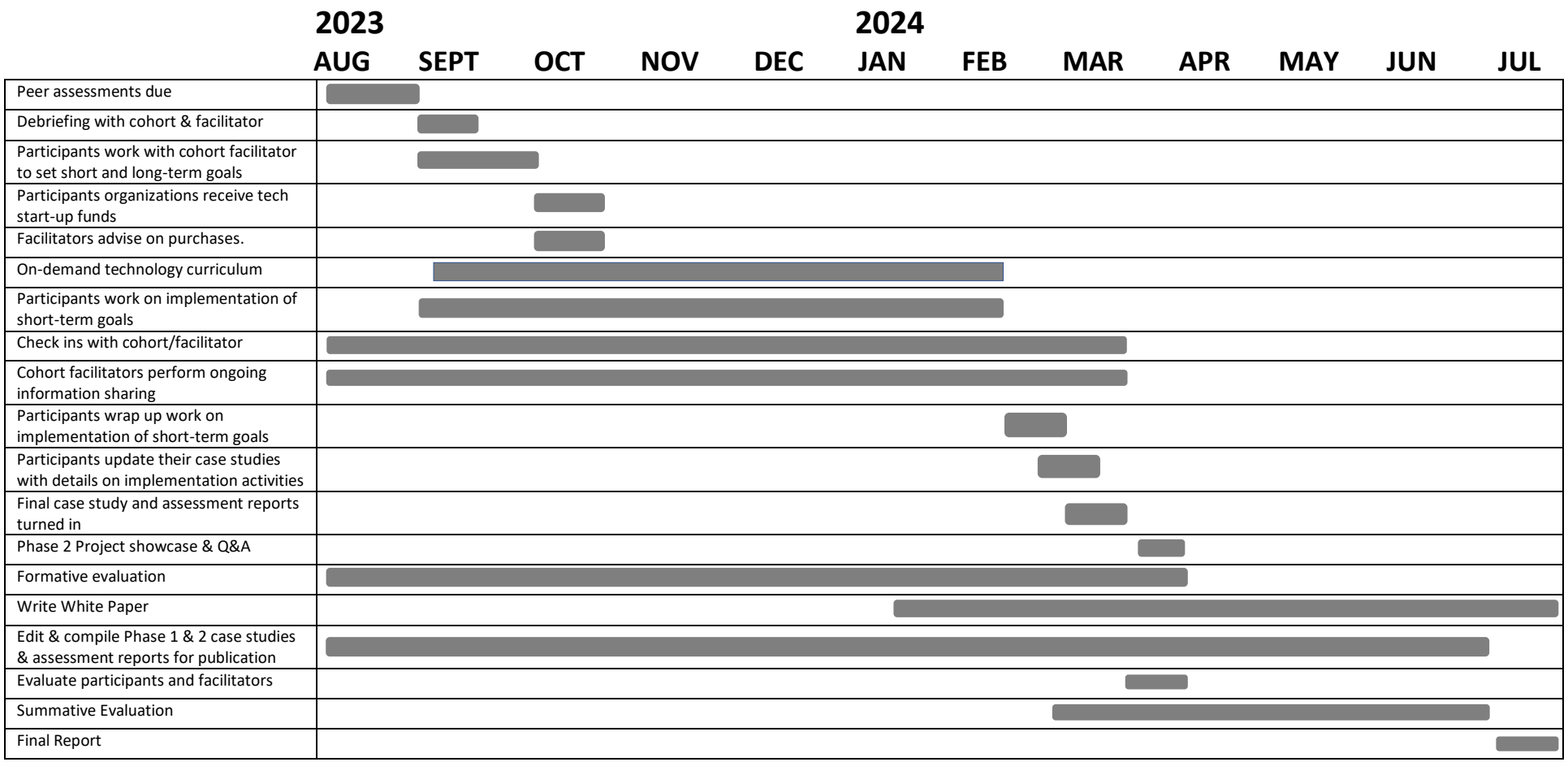
AZ Board of Regents on behalf of Arizona State University

Digital POWRR Peer Assessment Program: Empowering Collective Evaluation and Action – Schedule of Completion



AZ Board of Regents on behalf of Arizona State University

Digital POWRR Peer Assessment Program: Empowering Collective Evaluation and Action – Schedule of Completion



DIGITAL PRODUCT FORM

INTRODUCTION

The Institute of Museum and Library Services (IMLS) is committed to expanding public access to digital products that are created using federal funds. This includes (1) digitized and born-digital content, resources, or assets; (2) software; and (3) research data (see below for more specific examples). Excluded are preliminary analyses, drafts of papers, plans for future research, peer-review assessments, and communications with colleagues.

The digital products you create with IMLS funding require effective stewardship to protect and enhance their value, and they should be freely and readily available for use and reuse by libraries, archives, museums, and the public. 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

If you propose to create digital products in the course of your IMLS-funded project, you must first provide answers to the questions in **SECTION I: INTELLECTUAL PROPERTY RIGHTS AND PERMISSIONS.** Then consider which of the following types of digital products you will create in your project, and complete each section of the form that is applicable.

SECTION II: DIGITAL CONTENT, RESOURCES, OR ASSETS

Complete this section if your project will create digital content, resources, or assets. These include both digitized and born-digital products created by individuals, project teams, or through community gatherings during your project. Examples include, but are not limited to, still images, audio files, moving images, microfilm, object inventories, object catalogs, artworks, books, posters, curricula, field books, maps, notebooks, scientific labels, metadata schema, charts, tables, drawings, workflows, and teacher toolkits. Your project may involve making these materials available through public or access-controlled websites, kiosks, or live or recorded programs.

SECTION III: SOFTWARE

Complete this section if your project will create software, including any source code, algorithms, applications, and digital tools plus the accompanying documentation created by you during your project.

SECTION IV: RESEARCH DATA

Complete this section if your project will create research data, including recorded factual information and supporting documentation, commonly accepted as relevant to validating research findings and to supporting scholarly publications.

SECTION I: INTELLECTUAL PROPERTY RIGHTS AND PERMISSIONS

A.1 We expect applicants seeking federal funds for developing or creating digital products to release these files under open-source licenses to maximize access and promote reuse. What will be the intellectual property status of the digital products (i.e., digital content, resources, or assets; software; research data) you intend to create? What ownership rights will your organization assert over the files you intend to create, and what conditions will you impose on their access and use? Who will hold the copyright(s)? Explain and justify your licensing selections. Identify and explain the license under which you will release the files (e.g., a non-restrictive license such as BSD, GNU, MIT, Creative Commons licenses; RightsStatements.org statements). 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.

All curriculum materials and project documentation created through the project will be accessible to public for free, and will be assigned the Creative Commons Attribution Non-Commercial 4.0 International License (CC BY-NC 4.0), which allows others to remix, tweak, and build upon POWRR's work non-commercially. This allows the material to be widely distributed and freely used, while ensuring that POWRR maintains authorship of the materials.

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.

Arizona State University would not assert any restrictions over the digital products that this project would produce. Digital POWRR would not impose any conditions on access and use of the materials.

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.

The final white paper will include a compilation of works produced by project participants including case studies and peer assessment reports. Project staff will produce a waiver form that participants may fill out, to register if they have privacy concerns over their materials being made public in any way. Project staff will not share materials that participants do not want shared due to privacy issues or due to cultural sensitivity reasons.

SECTION II: 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 the format(s) you will use.

Digital content will include curriculum materials, final white paper, case studies & peer assessment reports, and recordings of the final project showcase for each phase. These will include downloadable Word, PDF, and PowerPoint documents. Participant materials will be created in GoogleDocs, but will additionally be converted to Word & PDF by the team so they can be compiled into a larger document. Recordings of curriculum materials and of project showcases will also be posted in multiple video formats (MP4, MOV.) The project website will be in XML & HTML, and will include information about the IMLS grant and updates We estimate that we will create 5 new web pages on the project website, and that around 25 total files will be shared on the website. We estimate around 150 internally shared documents.

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

The PI will use computers and software provided by Arizona State University, as well as cloud storage that enables encryption. Project advisors, cohort facilitators, and project participants will use their own personal computing equipment, or equipment provided through their places of employment. The project will use WordPress software for the project website. Curriculum materials will be developed by using Microsoft Office Suite Google, Office Suite, and Adobe Creative Suite. Teleconference software will be Zoom. Participants will create their case studies and assessment reports in Google Drive, so that they can be easily shared with their cohort and cohort facilitator.

A.3 List all the digital file formats (e.g., XML, TIFF, MPEG, OBJ, DOC, PDF) you plan to use. If digitizing content, describe the quality standards (e.g., resolution, sampling rate, pixel dimensions) you will use for the files you will create.

.PDF, .DOCX, .PPTX, .MP4, .MOV, .HTML

Workflow and Asset Maintenance/Preservation

B.1 Describe your quality control plan. How will you monitor and evaluate your workflow and products?

PI and Project Advisors will monitor participant-created materials to ensure they are adhering to any applicable templates as necessary for their written reports.

B.2 Describe your plan for preserving and maintaining digital assets during and after the award period. Your plan should 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).

At the conclusion of the project, the PI will post all curriculum materials and the final white paper on the official POWRR website (http://digitalpowrr.niu.edu), which is maintained by the Northern Illinois University Library, and resides on their servers. The PI also will deposit all curriculum materials and white paper in ASU's KEEP institutional repository, which organizes, preserves, and provides access to scholarly content in a variety of formats. KEEP is part of the ASU Library repository ecosystem, which follows strict back-up and recovery procedures. The materials posted on the project's website will remain indefinitely, even after the event that the PI leaves the University, and will be modified as new updates occur.

Metadata

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

The KEEP repository follows a localized implementation of the MODS metadata schema. ASU libraries support KEEP in providing good metadata in order to enhance the sharing and discoverability of resources.

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

KEEP will preserve the content to assure digital file stability, longevity, and security using digital preservation standards and techniques, including geographically distributed copies with different storage providers, fixity checking, format migration when necessary, and the use of handles as persistent identifiers, that will persist even if the underlying software changes.

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).

The KEEP repository enables OAI harvesting, so contents may be harvested by outside platforms. KEEP materials are harvested by ASU's OneSearch discovery layer (Primo).

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, delivery enabled by IIIF specifications).

KEEP provides public access and makes content visible in Google Scholar. It supports altmetrics, an additional metric of number of downloads of content. KEEP offers an interface for search and discovery of materials. The PI, project advisors, cohort facilitators, partner organizations and participants will promote these materials to professionals at conferences and other scholarly communication channels. Curriculum materials available in KEEP and the Digital POWRR website will be shared through email and direct links to library and information professionals, professional associations, and applicable professional listservs.

D.2. Provide the name(s) and URL(s) (Universal Resource Locator), DOI (Digital Object Identifier), or other persistent identifier for any examples of previous digital content, resources, or assets your organization has created.

Digital POWRR website: http://digitalpowrr.niu.edu
"Digital POWRR Project: Final Report to the IMLS": http://hdl.handle.net/10843/13678
"From Theory to Action: Good Enough Digital Preservation for Under-Resourced Cultural Heritage Organizations": http://hdl.handle.net/10843/13610
"Dataset for 'Intellectual Property at Risk": http://hdl.handle.net/10843/13609
"The Digital POWRR Project: Enabling Collaborative Pragmatic Digital Preservation Approaches": http://hdl.handle.net/10843/13618
"Overwhelmed to Action: Digital preservation challenges at the under-resourced institution": 10.1108/oclc-06-2013-0019

SECTION III: SOFTWARE

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.

N/A

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

N/A

Technical Information

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

N/A

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

N/A

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

N/A

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

N/A

B.5 Provide the name(s), URL(s), and/or code repository locations for examples of any previous software your organization has created.

N/A

Access and Use

C.1 Describe how you will make the software and source code available to the public and/or its intended users.

N/A

C.2 Identify where you will deposit the source code for the software you intend to develop:

Name of publicly accessible source code repository:

N/A

URL:

N/A

SECTION IV: RESEARCH DATA

As part of the federal government's commitment to increase access to federally funded research data, Section IV represents the Data Management Plan (DMP) for research proposals and should reflect data management, dissemination, and preservation best practices in the applicant's area of research appropriate to the data that the project will generate.

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

N/A

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?

N/A

A.3 Will you collect any sensitive information? This may include personally identifiable information (PII), confidential information (e.g., trade secrets), or proprietary information. If so, detail the specific steps you will take to protect the information while you prepare it for public release (e.g., anonymizing individual identifiers, data aggregation). If the data will not be released publicly, explain why the data cannot be shared due to the protection of privacy, confidentiality, security, intellectual property, and other rights or requirements.

N/A

A.4 What technical (hardware and/or software) requirements or dependencies would be necessary for understanding retrieving, displaying, processing, or otherwise reusing the data?

N/A

A.5 What documentation (e.g., consent agreements, data documentation, codebooks, metadata, and analytical and procedural information) will you capture or create along with the data? Where will the documentation be stored and in what format(s)? How will you permanently associate and manage the documentation with the data it describes to enable future reuse?

N/A

A.6 What is your plan for managing, disseminating, and preserving data after the completion of the award-funded project?

N/A

A.7 Identify where you will deposit the data:

Name of repository:

URL:

A.8 When and how frequently will you review this data management plan? How will the implementation be monitored?

N/A