National Forum on the Assessment of Scholarly Communication Programs

The Sacramento State University Library, in collaboration with the San Jose State University Library, seeks a National Forum grant totaling $149,796 from the IMLS National Leadership Grants for Libraries program to hold a two-day forum that will focus on standards and best practices in evaluating scholarly communication programs at M1 Carnegie classified public universities. This project will have three phases: initial focus groups both in-person and virtually to establish topics for the national forum; a national forum for approximately 25 experts and others interested in the topic to gather for a two-day workshop in May 2020; and the authoring and dissemination of a whitepaper and assessment rubric presenting our findings. The project would run from August 2019 through December 2020.

With new technologies and paradigms for creating and sharing work, scholars across all fields have seen changes in research output, dissemination and preservation of the scholarly record, emergent publishing models, and the measurement of scholarly impact. Libraries have broadly defined their efforts to address these concerns as “scholarly communication” services. During the past two decades, academic libraries have begun to further invest in scholarly communication through the allocation of staffing and resources and even establishing institutional repositories. However, quantifying the actual outcome or impact of these scholarly communication activities remains elusive, beyond output measures such as simple counts of consultations, workshop attendance, or by repository downloads or growth. Library assessment, especially assessment of information literacy concepts and programs, has been a focus of recent literature and professional practice. We propose to reframe these discussions to determine how existing library assessment techniques can be implemented for scholarly communication services. Our audience includes academic librarians, library administrators, and campus stakeholders working at M1 institutions in the U.S., especially those involved in scholarly communication in some form.

The outcome of this forum will be a whitepaper articulating a set of assessment best practices and an assessment rubric which, along with presentations and workshop materials, will be made available for download from the institutional repositories of both institutions, emailed to participants, and announced via various listservs and shared at national conferences. The whitepaper and especially the assessment rubric could be reused by similar institutions or adapted for other types of academic institutions with scholarly communication programs.

National Forum on the Assessment of Scholarly Communication Programs

Proposal Narrative

Statement of National Need

With new technologies and paradigms for creating and sharing work, scholars across all fields have seen changes in research output, dissemination and preservation of the scholarly record, emergent publishing models, and the measurement of scholarly impact. Libraries have broadly defined their efforts to address these concerns as "scholarly communication" services. During the past two decades, academic libraries have begun to further invest in scholarly communication through the allocation of staffing and resources and even establishing institutional repositories. However, quantifying the actual outcome or impact of these scholarly communication activities remains elusive, beyond output measures such as simple counts of consultations, workshop attendance, or by repository downloads or growth.

Establishing the infrastructure for a scholarly communication program, including an institutional repository (IR), represents a significant investment toward preserving, making accessible, and showcasing the intellectual and creative output of a university's community. It is widely acknowledged that IRs are of value – to the academic institution and its community and to the wider global audience who are accessing their work. In the California State University (CSU) system, the largest four-year public university system in the country, 13 of 23 CSU campuses have dedicated repository staffing; these campuses spend an average of $85,000 yearly on salaries. Five CSU campuses pay for proprietary repository services. Additionally, 14 of 23 CSU campuses are Carnegie classified as M1 institutions, representing a compelling trend among public universities of this kind. The purpose of this project is to seek wide and diverse input from scholarly communication practitioners and stakeholders on the myriad of quantitative and qualitative measures by which one could evaluate the IR and the larger scholarly communication program at M1 institutions, beyond narrow characterizations of usage and growth.

A review of the literature and of the academic libraries' professional organization (ACRL) website indicates a lack of consensus on performance indicators for scholarly communication services. Suggestions have ranged widely and have focused on disparate criteria. Cassella[1] argues that there are both internal and external perspectives on IR performance indicators. Adapting Robert S. Kaplan and David P. Norton's "balanced scorecard" framework to library performance measurement, Cassella identifies four critical internal elements – user perspective, internal process perspective, financial perspective, and learning and growth perspective – with three external criteria: interoperability, external IR funding secured, and participation in

[1] Maria Casella, "Institutional Repositories: An Internal and External Perspective on the Value of IRs for Researchers' Communities," *Liber Quarterly* 20 (2010): 211, 214, 220-221.

national/international projects. Meanwhile Lagzian, Abrizah, and Wee[2] prioritize critical success factors, highlighting six performance/achievement areas: management, services, technology, self-archive practices, people, and resources. With recent emphasis on student engagement, success, and retention, Passehl-Stoddart and Monge[3] advocate for student-centered repositories to improve student awareness of scholarly communication topics, including author's rights, copyright, permissions, and fair use, while Baughman, Roebuck, and Arlitsch[4] identify the mentioning of the IR in a library's strategic as significant and noteworthy.

IR content is highly localized and reflective of institutions' norms and priorities. Within that diversity, performance then is dependent upon IR practitioners' institutional practices and interpretations. Van Westrienen and Lynch[5] globally surveyed IR managers and found that there is even a lack of consistency in how international IR managers interpret and define metrics. Basic metrics, like number of objects that are generally used to quantify and indicate IR growth were reported quite differently, as some practitioners did not distinguish between metadata only and full-text objects. Notably, van Westrienen and Lynch highlight that university IRs are highly dependent upon national infrastructure. Availability of national data repositories, for example, can supplant the necessity for a local IR to accommodate data storage needs. Thus, IRs co-exist, complement, and possibly compete with other repositories, which ensures that the metrics by which success is determined is highly localized. Cullen and Chawner[6] assert that IR evaluation can only be done within the context of the academic community which the IR is purported to serve and within disciplinary patterns of scholarly communication. This is corroborated by Waugh, Hamner, Klein, and Brannon[7] who note that their faculty's perceptions of the IR are highly dependent upon their discipline areas. Indeed, Mercer, Rosenblum, and Emmett[8] indicate that meaningful indicators necessitate time, concerted effort, and the development of long relationships. They posit that the IR should and can effect change in the local and wider scholarly communication environment, and that success indicators should reflect those shifts in faculty behaviors. Measuring and documenting the impact of faculty's IR activities is one way to document the overall change in behaviors and mindsets to issues like open access, author rights,

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[2] Lagzian, Fatemeh, A. Abrizah, and Mee-Chin Wee, "Measuring the Gap Between Perceived Importance and Actual Performance of Institutional Repositories," *Library & Information Science Research* 37 (2015): 149.
[3] Erin Passehl-Stoddart and Robert Monge, "From Freshman to Graduate: Making the Case for Student-Centric Institutional Repositories," *Journal of Librarianship and Scholarly Communication* 2 (2014): 7.
[4] Baughman, Sue, Roebuck, Gary, and Kenning Arlitsch, "Reporting Practices of Institutional Repositories: Analysis of Responses from Two Surveys," *Journal of Library Administration* 58 (2018): 71.
[5] Gerard van Westrienen and Clifford A. Lynch, "Academic Institutional Repositories: Deployment Status in 13 Nations as of Mid 2005," *D-Lib Magazine* 11 (2005).
[6] Rowena Cullen and Brenda Chawner, "Institutional Repositories: Assessing Their Value to the Academic Community," *Performance Measurement and Metrics* 11 (2010): 145.
[7] Waugh, Laura, Hamner, Jesse, Klein, Janette, and Sian Brannon, "Evaluating the University of North Texas' Digital Collections and Institutional Repository: An Exploratory Assessment of Stakeholder Perceptions and Use," *Journal of Academic Librarianship* 41 (2015): 749.
[8] Mercer, Holly, Brian Rosenblum, and Ada Emmett, "A Multifaceted Approach to Promote a University Repository: The University of Kansas' Experience," *OCLC Systems & Services: International Digital Library Perspectives* 23 (2007): 14-15.

self-archiving, and library publishing. Bruns and Inefuku[9] also highlight the value of "empty" metrics, where the absence of participation and content is used to encourage faculty cooperation. "Empty" metrics or the lack of reporting statistics can enable repository managers to identify faculty who are not engaged for concentrated marketing and outreach opportunities. Further complicating this landscape is the fact that metrics can vary by platform provider or system. For example, Holmberg, Haustein, and Beucke[10] indicate that alternative metrics, or altmetrics, complement and highlight the value of IRs and promote OA. But even the application of altmetrics to IRs is piecemeal, as some IRs benefit from 3rd party integrations, while others must rely on subscriptions to content (if available). Thus, there is a lack of consistency among IRs and platforms in the availability of features and reporting measures, which affects standardization of the assessment of scholarly communication and IR programs.

ACRL recently provided a draft of the ACRL Research Agenda for Scholarly Communications and the Research Environment[11], which is "intended to encourage the community to make the scholarly communications system more open, inclusive, and equitable...and clearly identifies the most strategic research questions to pursue." Interestingly, the document did not indicate that shared agreement on performance indicators is an issue for concern or a priority for the profession.
Additionally, a recent discussion on the Digital Scholarship Section listserv[12] illustrates a lack of comprehensive assessment practices. Many of the institutions who discussed their assessment programs describe storytelling of individual successes or advocate logic models, combining counts with other qualitative measures. Some projects such as the Immersive Scholar[13] visualization project touch on the concepts of impact and assessment, but not in a systematic way, nor in a way that could be adapted by public institutions with less staffing and smaller budgets. Even IR data, widely seen as objective and straightforward, may be inaccurate (see the Repository Analytics & Metric Portal[14], Macintyre and Jones[15], and OBrien, Arlitsch, Sterman, Mixter, Wheeler, and Borda[16]). How to assess scholarly communication services are discussions that many

[9] Bruns, Todd and Harrison W. Inefuku. "Purposeful Metrics: Matching Institutional Repository Metrics to Purpose and Audience." *Making Institutional Repositories Work.* Ed. Burton B. Callicott, David Scherer, and Andrew Wesolek, 213-234. (West Lafayette, IN: Purdue University Press, 2016), 225.
[10] Holmberg, Kim, Stefanie Haustein, and Daniel Beucke. "Social Media Metrics as Indicators of Repository Impact." *Making Institutional Repositories Work.* Ed. Burton B. Callicott, David Scherer, and Andrew Wesolek, 234-248. (West Lafayette, IN: Purdue University Press, 2016), 244.

[11]"Draft ACRL Research Agenda for S. C.," ACRL, accessed March 1, 2019,

https://docs.google.com/document/d/1GsXSS-1Y4imMW3AdFVXNEtFSwO75ZXqJV3Q4EsIFBh8/edit.

[12] Joyce Ogburn, "Assessment of Digital Scholarship Services," *ACRL Digital Scholarship Section listserv*, http://lists.ala.org/sympa/arc/dss-l/2018-03/msg00022.html.
[13] "Immersive Scholar," Immersive Scholar, accessed March 1, 2019, https://www.immersivescholar.org/.
[14] "Repository Analytics & Metrics Portal," Repository Analytics & Metrics Portal, accessed March 1, 2019, http://ramp.montana.edu/.
[15] Ross Macintyre and Hilary Jones, "IRUS-UK: Improving Understanding of the Value and Impact of Institutional Repositories," *The Serials Librarian* 70 (2016): 103.
[16] OBrien, Patrick, Arlitsch, Kenning, Sterman, Leila, Mixter, Jeff, Wheeler, Jonathan, and Susan Borda, "Undercounting File Downloads from Institutional Repositories," *Journal of Library Administration* 56 (2016): 856.

academic libraries are engaging in, nevertheless, these local discussions have not resulted in national standards or best practices. IMLS funding is needed to bring this strategic conversation to fruition, so that next steps and actionable practices can be incorporated in our scholarly communication programs.

This project will gather experts in assessment and scholarly communication along with M1 public university stakeholders to develop an assessment framework for scholarly communication services – these include addressing assessment possibilities for the full range of digital tools that support the entire research and publication cycle, such as repositories, data management planning tools, and academic publishing support.

Project Design

Overview

The goal of the National Forum on the Assessment of Scholarly Communication Programs is to identify standards and best practices in evaluating scholarly communication programs at M1 Carnegie classified public universities. Output would include a whitepaper and assessment rubric that could be reused by similar institutions or adapted for other types of academic institutions with scholarly communication programs. Additionally, results of focus groups with library and campus stakeholders, as well as presentations and panels from a national forum, would be shared broadly with the scholarly communication community.

We hope to acquire IMLS funding to support the research, planning, and execution of a national forum as well as the subsequent activities required to disseminate the learning from the focus groups and forum. The national forum will include diverse participants from M1 institutions not limited to librarians, but including campus stakeholders in research offices, academic excellence, and other areas impacted by scholarly communication work. The work plan for this grant has been split out into three phases:

- Phase 1 – Focus Groups: The co-PIs will organize focus groups with librarians and campus stakeholders to identify which scholarly communication services are most widely implemented at M1 public universities and how those services could or should be assessed.
- Phase 2 – National Forum: Convene a two-day national forum on assessment of scholarly communication services in M1 public universities based on needs determined from the focus groups.
- Phase 3 – Dissemination: Synthesize the learnings from both the focus groups and national forum to compile a whitepaper and assessment rubric.

Rationale

Library investments in scholarly communication have continued to increase over the last two decades through staffing and software products. The California State University system funds a full-time developer to manage an open source repository system for many of the campuses. Five campuses have invested in proprietary institutional repository systems. Staffing dedicated to scholarly communication has risen at many of the CSU campuses including Sacramento State, where we currently are recruiting a Scholarly Communication Librarian and scholarly communication has become part of duties of at least 5 faculty and staff members. San Jose State has increasingly built up competencies in scholarly communication through software acquisition and increased staffing. Additional services offered in scholarly communication include a full-time staff member dedicated to the IR, student assistant funds, and three full-time librarians with scholarly communication duties (Scholarly Communication Librarian, Data Services Librarian, Research Impact Librarian). Other institutions are similarly growing their resources; a review of job titles of ARL library employees found that many of these institutions have or are restructuring to accommodate a new demand for scholarly communication services.[17] An earlier 2015 review of ALA JobLIST postings demonstrated comparable increases in job advertisements requiring competencies in scholarly communication.[18]

Consensus on the best way to evaluate these services, however, has not been reached. Library administrators are constantly seeking ways to demonstrate the value and impact of core library services and resources. Existing investments in scholarly communication are significant; it is prudent and necessary to attempt to contextualize how those resources, staffing, and services are meeting the organization's current and anticipated needs. Including those working outside of the library is necessary for us to ascertain real value; external administrators can help define what constitutes a successful scholarly communication program and the library's role in this program.

Our audience includes academic librarians, library administrators, and campus stakeholders working at M1 institutions in the U.S., especially those involved in scholarly communication in some form. By conducting research and creating a place for similar libraries to meet and discuss evaluation methods at their institutions, we can draw on external input to better assess our efforts and build necessary consensus on best practice.

Phase 1: Focus Groups

In October 2019, we will recruit approximately 20 participants for focus groups, which will be held at a special meeting following the Digital Library Federation (DLF) Forum and virtually via Zoom video conferencing. Recruitment will occur via the co-PIs' networks, via listservs, and in collaboration with DLF. Focus group participants will include scholarly communication practitioners in libraries and campus stakeholders from research offices, academic excellence centers, undergraduate research, graduate research, etc. Those attending the DLF Forum will be encouraged to attend the in-person session. Those who cannot attend will participate in virtual focus groups. From August to October 2019, we will work with our evaluator Lili Luo to design focus group questions and prepare for the execution of in-person and virtual focus groups. Lili will serve as the moderator for focus groups, with support from the project's key personnel.

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[17] Million, A. J., Hudson-Vitale, Cynthia, and Heather Moulaison Sandy, "Restructuring and Formalizing: Scholarly Communication as a Sustainable Growth Opportunity in Information Agencies?" *Proceedings of the Association for Information Science and Technology* 55, no. 1 (2018): 377–386, doi:10.1002/pra2.2018.14505501041.

[18] Finlay, Craig, Tsou, Andrew, and Cassidy Sugimoto, "Scholarly Communication as a Core Competency: Prevalence, Activities, and Concepts of Scholarly Communication Librarianship as Shown Through Job Advertisements," *Journal of Librarianship and Scholarly Communication* 3, no. 1 (2015): EP1236, doi: http://doi.org/10.7710/2162-3309.1236.

During the focus groups, we will discuss inputs/outputs/outcomes that institutions use to report their scholarly communication successes and failures. Every effort will be made to ensure that we receive feedback from a diverse group of participants and stakeholders. Participants in the in-person focus group will be given stipends to offset additional lodging costs from attending an extra day at the DLF Forum. We plan to invite 7 experts in either scholarly communication or assessment with stipends to the in-person focus group and offer 3 scholarships for additional participants. Strong scholarship candidates who we cannot financially accommodate at in-person sessions will be invited to virtual focus groups in October or November. Recruiting scholarship candidates allows us to get feedback from early career individuals, who may not be as entrenched in the scholarly communication conversations and can therefore offer unique perspectives. In November and December 2019, we will transcribe the audio recordings to anonymized transcripts and use NVivo to automate analysis of themes/sentiment. We will review transcripts and this analysis to find themes and topics that can be used to plan and inform the national forum sessions and discussions.

Phase 2: National Forum Planning and Execution

Based on the results of the focus groups, in November 2019 we will begin planning the two-day national forum in May 2020. We anticipate hot topics that will emerge from focus groups to include the following: research data management planning tools, copyright services review, publishing support services, as well as how to apply library assessment and information literacy assessment techniques to scholarly communication assessment. We will recruit a panel of scholarly communication practitioners and campus stakeholders to participate in the forum as well as assist with whitepaper and rubric development. Grant funding will support attendance at the national forum for approximately 22 practitioners and experts. We propose to recruit these attendees not only from scholarly communication, but also from library or campus assessment, who may have experience in scholarly communication, to present and lead discussions on how existing assessment techniques can be implemented for scholarly communication services. The forum will be open to the public with free registration opening in March. Some potential participants have already provided letters of support (see supporting documents). The forum will include plenary sessions at the start and conclusion to frame and subsequently synthesize discussions.

This two-day forum will take place at California State University, Sacramento and will be open to scholarly communication practitioners in addition to the recruited practitioner and expert panel. Stipends of $1,500 will be provided for 22 experts to cover travel and lodging costs for the forum. Additionally, we will offer equivalent $1,500 scholarships to three participants who apply via a competitive process. Pre- and post-surveys developed by the project evaluator will be distributed to participants to gauge satisfaction with the national forum’s content and conclusions.

Minutes (taken by the three Co-PIs) from the national forum as well as pre- and post-survey results will be ingested into NVivo for analysis. These results, combined with the results from the focus group sessions, will inform the whitepaper and rubric to be developed in phase 3.

Phase 3: Whitepaper and Rubric Development; Dissemination

In summer 2020, the key personnel will synthesize the findings from the meeting and begin a draft of the whitepaper and assessment rubric. The assessment rubric will include criteria for evaluation as well as performance levels and descriptions of these levels.[19] A draft will be completed and shared with the evaluator and expert panel for review and feedback during early Fall 2020, with publication and dissemination in December 2020 at the conclusion of the grant.

Listservs we plan to share our results with include those from ACRL's Digital Scholarship Section, ACRL Scholarly Communication, DLF, LLAMA Library Administration Discussion list, ARL-assess, LITA, ALA Digital Preservation Interest Group, CNI, the Scholarly Kitchen, etc. We will reach out to organizations such as ACRL, SPARC, and the Society of Scholarly Publishing to inform them of the work that we have completed for further sharing. We plan on submitting conference proposals to conferences such as Open Repositories, ALA Annual, ACRL, DLF, and the Library Assessment Conference.

Project Resources

Key Personnel

Suzanna Conrad is Associate Dean of Digital Technologies and Resource Management at Sacramento State. As past convener of the ACRL Digital Curation Interest Group, she led the group's initial conversion to the Digital Scholarship Section, a new Section within ACRL, which expanded ACRL's scope and direct interest in scholarly communication as it pertains to digital scholarship. Suzanna will serve as the Program Director for the grant.

Nicole Lawson is Associate Dean for Academic Services at Sacramento State. In this capacity she leads public services, instruction, and assessment planning for the library. Nicole is a co-PI and will lead conversations regarding the incorporation of library assessment practices into scholarly communication practices.

Emily Chan is Interim Associate Dean, Research and Scholarship for the University Library at San José State University (SJSU). As SJSU's former Scholarly Communications Librarian, she managed the campus institutional repository and led the library's efforts in supporting scholarly communication. Emily is a co-PI and will lead conversations regarding best practices in scholarly communication.

Yvonne Harris is Associate Vice President for Research, Innovation and Economic Development at Sacramento State. She is responsible for providing vision and leadership for increasing campus activities in sponsored research, grants, and contracts as well as innovation, technology transfer and economic development activities. Yvonne will serve as the representative of campus stakeholders for our grant.

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[19] Some examples of assessment rubrics are available, albeit more focused for library instruction, on the Rubric Assessment of Information Literacy Skills (RAILS) project website. "Rubrics." *Rails on Track,* railsontrack.info/rubrics. Some more complex rubric examples that could be used as a basis include the "Integrated Digital Collections" rubric (http://railsontrack.info/rubrics/detail/225), "Peer-to-Peer Instruction Program" (http://railsontrack.info/rubrics/detail/154), and "Reference Service" (http://railsontrack.info/rubrics/detail/100).

Lili Luo, Professor at SJSU's School of Information, will serve as the evaluator on this grant. She is well versed in research design and is both a lead instructor for the Institute of Research Design in Librarianship and the coordinator of SJSU's Center for Information Research and Innovation.

Timeline

The activities for this grant will take place over a period of eighteen months from August 2019 through December 2020. Key personnel will engage in multiple focus groups (both in-person and virtual), bi-monthly planning meetings, a national forum, and subsequent meetings to compile results and draft outputs. Timeframes for each project phase is detailed in the Schedule of Completion.

Budget

Funding will support a part-time Administrative Support Coordinator, who will assist with planning and scheduling the focus groups and National Forum event ($33,600 including benefits). Travel costs include focus group participant stipends for attending DLF an extra day ($3,000 for 10 participants); travel stipends for experts to participate in the National Forum ($37,500 for 25 participants); travel costs for the PIs and evaluator ($10,500); an evaluator to assist with crafting and moderating the focus groups ($10,000 including benefits); refreshments and venue fees for the forum and for DLF focus groups ($4,500); two NVivo licenses ($1,600); and equipment and supplies ($600). Indirect cost rates for our institution are $44,184 (calculated at 42%); $3,900 in indirect costs are incurred through the sub-award to San Jose State (calculated at 26%). The total budget for this project is estimated at $149,384.

Evaluation

Lili Luo will serve a pivotal role in ensuring that this project fulfills its goals. Review meetings will be scheduled with Lili at key points of the grant. The co-PIs will meet with Lili before focus groups to review scripts and topics as well as prepare for the day of focus groups. Lili will moderate focus groups at DLF and virtually. After results of the focus groups are compiled and analyzed, we will meet with Lili to review the results and our suggestions for national forum topics. After the national forum, we will again debrief with the evaluator by reviewing results and analysis. Finally, Lili will review our rubric and whitepaper to ensure that we have represented the data collected in focus groups and the national forum.

Goals, assumptions & challenges

We aspire to organize a national forum that, based on results from focus groups, addresses and targets issues with scholarly communication program assessment. Success factors include focus group participation of at least eight appropriate scholarly communication or assessment library staff from M1 institutions at a focus group after the DLF Forum; participation of at least 5-6 campus administrators from M1 institutions in a virtual focus group; and a national forum with at least 25 experts and participants. The subsequent whitepaper and rubric are tangible elements of success, which should be disseminated broadly across appropriate channels.

We assume that that the people we will engage in focus groups and at the national forum have clear ideas on how to measure success, albeit these ideas might not be concrete or scalable. Additionally, we assume that the external campus stakeholders we involve are interested in a conversation on assessing scholarly communication.

We acknowledge that we may have challenges finding participants to attend in-person or virtual focus groups. To address this challenge, we have already begun compiling lists of potential collaborators, who may be interested in participating in focus groups, the national forum, or both. Some of these potential partners have already been identified via letters of support (please see our supporting documentation). We believe that we can continue to network to pull in relevant voices at M1 institutions by reaching out to these potential collaborators and their contacts. Additionally, assessment of scholarly communication services has, as seen by the literature, been an elusive topic to many. The incorporation of focus groups before the national forum ensures that the event will be a success as we would have already worked through some of the more elusive topics and questions. Furthermore, the network we will nurture as part of this project will help us to check in on our goals and make sure we are on track; participants in the national forum will have a voice in the whitepaper and rubric drafting, encouraging the building of consensus.

Diversity Plan

In focusing on M1 classified institutions, we will be working with stakeholders who represent a diverse faculty and student population. Many of these institutions serve significant populations of underrepresented minority (URM) students and are designated as Hispanic Serving Institutions (HSIs) and Asian American and Native American Pacific Islander-Serving Institutions (AANAPISI). For example, in the fall of 2018 the CSU System enrolled 317,662 students who identified as part of an ethnic minority, representing 66% of the total student population[20]. Among the faculty, 4,362 (33%) were minority-identified[21]. More than 33% of students enrolled at the 23 CSU campuses are also the first in their families to attend college[22]. By ensuring that student and faculty scholarship is open and accessible, scholarly communication programs at M1 institutions bring vital equity and inclusion to the intellectual marketplace.

In order to encourage a diverse participation in the first phase of this project, as well as minimizing time and expense impacts, one focus group will coincide with DLF and the other will be held virtually using video-conferencing software. For the ten participants invited to the focus group at the DLF Forum in Tampa, this proposal includes funding to cover the additional travel cost. During the second phase of the project, this proposal includes funding for 25 participants to travel to Sacramento for the national forum event.

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[20] "CSU Enrollment by Ethnic Group, Fall 2018," CSU Institutional Research and Analyses, accessed March 1, 2019, http://www.calstate.edu/as/stat_reports/2018-2019/feth02.htm.

[21] "Full-Time Faculty by Rank, Gender and Ethnicity (Headcount) Fall 2017," CSU, accessed March 1, 2019, https://www2.calstate.edu/csu-system/faculty-staff/employee-profile/csu-faculty/Pages/full-time-faculty-by-rank-gender-and-ethnicity.aspx.

[22] "The California State University 2018 Factbook," CSU, accessed March 1, 2019, https://www2.calstate.edu/csu-system/about-the-csu/facts-about-the-csu/Documents/facts2018.pdf.

At both phases we intend to work with DLF and other professional organizations to recruit 3 scholarship-funded attendees from underrepresented groups in research and librarianship in higher education.

National Impact and Outcomes

Recently funded research in scholarly communication has focused narrowly on topics such as open access collection development[23], training librarians to create open educational resources (OER)[24], and improving the usability and usage metrics for institutional repositories[25]. Indeed, the ACRL Research Agenda for Scholarly Communications and the Research Environment calls out these areas, as well as improving diversity and inclusion amongst practitioners and collections. This national forum will take an urgently needed holistic view of scholarly communication by exploring how to develop relevant, meaningful and scalable assessment metrics at the program level, while also gathering stakeholders who work with an exceedingly diverse segment of scholarly content creators - students and faculty at M1 public institutions.

As publicly-funded entities, M1 institutions are uniquely positioned to quantify the value of scholarly communication, given their broad mandate to regularly prove that they are good stewards of taxpayer investment. That stewardship is conveyed not only through student success indicators, but also by tracking the positive impact that their student and faculty research has in the local and regional community. Research initiatives often focus on intractable socio-cultural, economic, and environmental issues in these communities. By fostering, preserving, and making discoverable on a global scale their local scholarship, M1 institutions are sustaining and amplifying its impact.

Using the data gathered from the focus groups, the national forum will bring together librarians and their campus partners in the Offices of Research, Graduate Studies, Undergraduate Research, and Assessment and Planning to critically examine models for assessing scholarly communication services. While the participants will represent M1 institutions with similar resources and challenges, we will be focusing on scalable solutions that can be implemented across the spectrum from small private to large R1 institutions.

The outcome of this forum will be a whitepaper articulating a set of assessment best practices and an assessment rubric. As experts from across the spectrum of research and scholarship support, participants in the forum will be ideally suited to champion our results to their professional networks and organizations. We intend to disseminate both deliverables broadly via scholarly communication and assessment listservs, as well as curating them in our local institutional repositories. We also envision that a future phase of this project would include developing training materials and hands-on workshops to guide implementations of the best practices and rubric.

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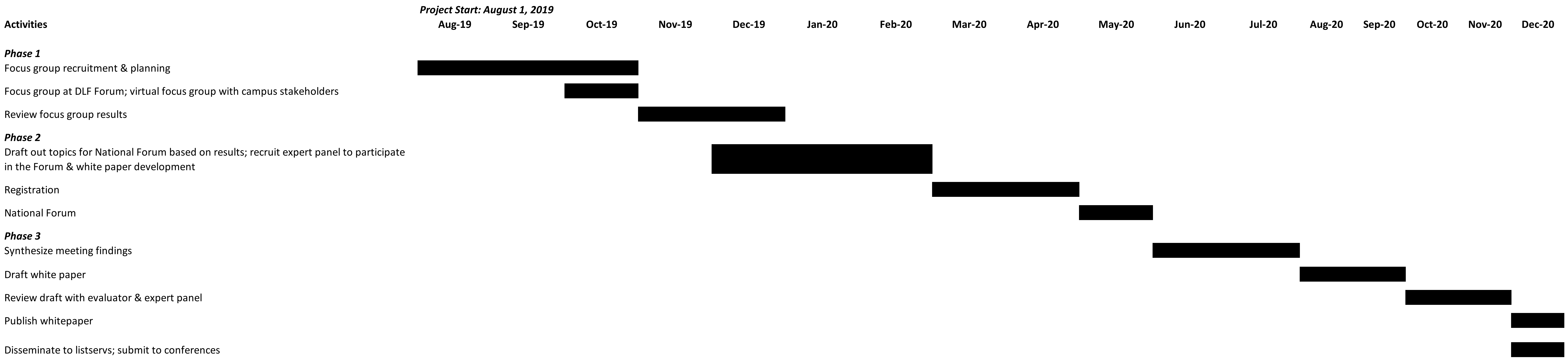
[23] "Supporting OA Collections in the Open," JMU Libraries, accessed March 1, 2019, https://sites.lib.jmu.edu/OA-forum/.
[24] "OER + ScholComm: Open Culture & Next Gen Librarianship," OER + ScholComm, accessed March 1, 2019, https://lisoer.wordpress.ncsu.edu/about/.
[25] "Repository Analytics & Metrics Portal," Repository Analytics & Metrics Portal, accessed March 1, 2019, http://ramp.montana.edu/.


Project Start: August 1, 2019
Activities
Aug-19
Sep-19
Oct-19
Nov-19
Dec-19
Jan-20
Feb-20
Mar-20
Apr-20
May-20
Jun-20
Jul-20
Aug-20
Sep-20
Oct-20
Nov-20
Dec-20
Phase 1
Focus group recruitment & planning
Focus group at DLF Forum; virtual focus group with campus stakeholders
Review focus group results
Phase 2
Draft out topics for National Forum based on results; recruit expert panel to participate in the Forum & white paper development
Registration
National Forum
Phase 3
Synthesize meeting findings
Draft white paper
Review draft with evaluator & expert panel
Publish whitepaper
Disseminate to listservs; submit to conferences

DIGITAL PRODUCT FORM

Introduction

The Institute of Museum and Library Services (IMLS) is committed to expanding public access to federally funded digital products (e.g., 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. 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

All applications must include a Digital Product Form.

☐ Please check here if you have reviewed Parts I, II, III, and IV below and you have determined that your proposal does NOT involve the creation of digital products (i.e., digital content, resources, assets, software, or datasets). You must still submit this Digital Product Form with your proposal even if you check this box, because this Digital Product Form is a Required Document.

If you ARE creating digital products, 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.

We intend to offer the outputs of this project under a Creative Commons Attribution-NonCommercial-ShareAlike (CC BY-NC-SA), specifically the whitepaper, assessment rubric, and anonymized transcripts of focus group sessions. Presenters at the National Forum retain intellectual property of their works.

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.

We retain ownership of the outputs created as part of this project, but access and use is open to the public via institutional repository access. Presenters at the National Forum retain ownership of their presentations and presentation 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.

N/A

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 the format(s) you will use.

- Focus group recordings and transcripts: We will create 3-4 recordings of focus groups in WAV and MPEG4 format. The in-person focus group audio will be recorded using Audacity. Focus groups conducted virtually will be recorded in Zoom and saved as WAV and MPEG4 (with video) files. Additionally, we will generate corresponding anonymized transcripts in Microsoft Office DOCX format.
- Meeting minutes and agendas: We will save meeting minutes and agendas in DOCX format and expect that approximately 30 documents will be created.
- PPTs, PDFs and other presentation files from the National Forum (~20 in total) will be generated and saved.
- One whitepaper will be created in Microsoft Office DOCX format and distributed as a PDF. An assessment rubric will be created and shared as a Microsoft Office XLSX and as an Adobe Acrobat PDF.

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.

We will use University owned laptops and desktops to generate focus group recordings and transcripts as well as meeting minutes, agendas, the whitepaper, and assessment rubric. These will be created using Audacity (audio recording), Zoom (audio and video recording), and Microsoft Office. These materials will be stored in a password protected cloud service during the grant period. Those to be publicly shared will be moved to a Samvera and Digital Commons institutional repository at the conclusion of the grant.

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).

WAV, uncompressed
MPEG4, single-resolution with fixed frame rate format
Microsoft Office DOCX, XLSX, PPT
Adobe Acrobat PDF tagged for 508 compliance

B. Workflow and Asset Maintenance/Preservation

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

The Administrative Support Coordinator II will transcribe the focus group sessions, take minutes at meetings, and assist with generating documentation (whitepaper and assessment rubric) for the grant. This person will review all documents for accuracy and make corrections. Documents will also be proofread by Sacramento State Associate Deans.

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).

The whitepaper, assessment rubric, anonymized transcripts, and presentations from the project will be shared and preserved beyond the life of the project. The outputs will be deposited into Sacramento State University Library's Samvera platform and in San Jose State University Library's Digital Commons platform and will be publicly accessible. Both platforms are called ScholarWorks. The recordings of focus groups will be stored on a password protected shared network drive at Sacramento State.

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).

Metadata for items saved to ScholarWorks will be authored in Qualified Dublin Core. This metadata will be generated by Sacramento State's Collection Management Services Department, who deposit other items in ScholarWorks currently.

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

All data stored in ScholarWorks will be protected with a multi-tiered disaster recovery plan utilizing fail-over servers and regular on-site and off-site backups. Additionally, separate copies of all files submitted to ScholarWorks are pushed to Amazon Glacier, which provides an additional long-term preservation copy.

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).

N/A

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).

Items in ScholarWorks can be accessed for free from anywhere in the world.

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.

http://scholarworks.csus.edu & http://scholarworks.sjsu.edu

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.

N/A

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.

N/A

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.

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) and URL(s) for examples of any previous software your organization has created.

N/A

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.

N/A

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

N/A

C.3 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

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.

Data collected includes focus group WAVs, MPEGs, and transcripts.

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?

This project will require IRB review as it involves human subjects. It has not yet been reviewed or approved, but we would follow standard procedures to submit the project for review: https://www.csus.edu/research/irb

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).

Focus group participants could be identified by their voices on the recordings, thus we will only share transcripts of the sessions, which will be anonymized before publicly shared.

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.

We will require focus group participants to sign a consent form, either in paper or electronic form. Copies of these consent forms will be saved on a password protected shared network drive at Sacramento State.

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).

We will use laptops to capture audio and video recordings and desktops to generate transcripts. Software used: Audacity, Zoom and Microsoft Office DOCX.

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?

We will create a readme text file to associate with the datasets that will be stored in the same location as the datasets.

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

At the conclusion of the project, we will share the anonymized transcripts publicly via ScholarWorks along with the other outputs (whitepaper, rubric, presentations) of the project.

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

Name of repository:

CSU ScholarWorks (Sacramento State & San Jose State)

URL:

https://scholarworks.csus.edu & https://scholarworks.sjsu.edu

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

We will review this data management plan at the start of the project, when the data is collected, and at the conclusion of the project to ensure that we have implemented the plan as promised.