

USVI Library/Community Collaboration: Training & Technology Innovations

Across the globe, since the start of the COVID-19 Pandemic, there have been very few organizations conducting business as usual. Governments, schools, businesses and society as a whole responded to the crisis by locking down and sheltering in place while employing strategies to continue operations with varying degrees of success. The United States Virgin Islands (USVI) has fought aggressively to contain the virus, recognizing that as a popular tourist destination, there was high risk for travel-related infection as the disease spread rapidly around the world. A partial shutdown within the Territory remains, one year after the start of the pandemic.

As the only institution of higher education within the Territory, the University of the Virgin Islands (UVI) recognizes its role and responsibility as a leader in finding solutions that address community challenges. Further, as a Land Grant institution, UVI partners regularly with the general community for a wide range of Cooperative Extension and other general capacity-building events.

UVI Libraries are freely-accessible to the Territory's general community, through in-person access, and through the Libraries' web presence. This effective community outreach exemplifies a unique strategy for filling information-seeking gaps within the library surroundings. At UVI there are 811 general community persons enrolled in the Libraries' *Preferred User Program*, which provides special borrowing privileges and expanded UVI Network access. This program is available to all members of the community, who may simply supply basic information in order to join. With under 500 employees and about 1700 students, the community borrowers make up a large segment of the service population of the University. As the UVI Libraries continue to model effective academic library outreach, the librarians recognize the need for even greater community support. The urgency for Libraries at UVI to join leaders within the Territory in responding to the resulting socioeconomic and healthcare demands of the COVID-19 pandemic could not be more drastic. These demands are echoed daily in the national media, and highlight the widespread crises that directly impact the environment in which all libraries operate. It is this urgency that propels the UVI Libraries to pursue a National Leadership Grants project to promote lifelong learning within the communities.

The proposed project seeks to develop technology skills for telehealth and information-seeking through partnership with nine (9) community organizations. The tools to be included in the training may include but are not limited to Zoom, Teams, Free Conference Call videoconferencing, and Skype. Trainees will be taught basic steps for operating their smartphones and handheld devices or laptops for successful communication. UVI Librarians will model train-the-trainer preparation that equips leaders among the community partners to deliver training to their own stakeholders. Further, the librarians will provide access to technology support in line with the scope of this training project, through the UVI Libraries' virtual helpdesk. The same train-the-trainer leaders and training participants would continue to access the virtual helpdesk for assistance, responding to technology support needs of the groups within the scope of the training delivered. The community partners will engage in project support through the development of a five to seven (5-7) member advisory group comprised of their own leaders. The advisory group will target their members for training; facilitate assessment data collection that is integrated into the training program; identify training challenges, and recommend solutions during the project; and establish a framework for sustaining benefits of the project beyond the funding period.

The project has the potential for broad national impact as an innovative model for academic library collaboration with community organizations to support life-long learning, as well as for modeling physical distancing solutions in the age of COVID-19 and beyond. This model of university library as community library can be replicated in rural or other areas where public library availability or schedules are lacking. The ability to access new technologies effectively increases the user's options for quicker and easier access to

health, education, business and other community functions and services in conducting activities of their daily living.

Statement of National Need

Many of the issues to be addressed by this project are not unique to our Territory. The challenges of navigating routine social and developmental activities during a crisis of epic proportions have been experienced on local and national levels. In the same way, caring for the population in which our libraries reside is also the mission of local and national libraries, and speak to the current significance of this project. The training and technology solutions identified by this project to care for students and mature adults are designed to serve these needs during the present extraordinary times. The project has potential for broad national impact by building capacity that closes digital gaps with transferable skills and resources that address development needs, situations and events across the lifespan, particularly in communities with limited access to libraries and high-speed internet service. Academic librarians on the national level are seeking these same solutions. The project models a creative solution that expands academic library options for community outreach.

Project Justification

Even as the Territory joins the rest of the nation in reducing COVID-19 cases, hospitalizations and deaths, the challenges for returning to normalcy remain evident. Current national events, such as the struggle to resume in-person classes, and the variety of factors that challenge businesses and the public sector in restarting operations, signal the continuing need for hybrid service-delivery options and for strengthening technology skills to navigate new information sources beyond the pandemic. Demands for telehealth and remote communication tools have exploded in every arena. Academic libraries everywhere are compelled to pivot to increased support for core programming by extending beyond traditional clientele to establish connections that benefit the local communities.

The “*USVI Library/Community Collaboration: Training and Technology Innovations*” project addresses the nationally significant challenge for closing persistent and long-standing technology gaps in underserved populations. The gaps that are especially evident in many communities following COVID-19 response, are by no means limited to current conditions, but have been merely underscored by the extraordinary challenges of the global response. The technology skills acquired will serve the participants beyond the era of COVID-19, enhancing experiences for accessing services such as banking and finance, joining conference calls and virtual meetings, or taking online classes and participating in social media forums. There is overwhelming urgency for UVI Libraries to respond to the crisis, in keeping with the Institution’s mission to educate and empower the Territory, the Caribbean and the world. The proposed project provides a major opportunity for strategic collaboration with multi-type partners. It will model effective integration of Library/IT professionals with trained community partners for outreach training that addresses this national need.

Challenges/Opportunities and Needs Assessment

COVID-19 is reflecting the extent of the technological gap for disadvantaged and rural communities, and is providing a nationally significant challenge and opportunity for UVI Libraries to model sound academic library leadership. The significance of the issue is evident through a confluence of factors, some exposed by the pandemic, others resulting from the ensuing conditions.

1. (a) Surveys by the Virgin Islands Department of Education in assessing school student capacity for online classes during the COVID-19 lockdown, showed that 18% of households with school-age children

had no Internet access at all; and 33% had only a cell phone or tablet for completing homework and class assignments (Governor's Press Conference, 2020). This reporting is in sync with national reports of school students' failure to engage, in addition to staggering levels of student absences from virtual classroom platforms, exposing the existing technology gaps. Many students have not checked in at all during the year, despite government efforts to distribute technology devices for online connectivity and computing tools. The data and reporting expose the lack of local and national capacity to achieve goals for teaching and learning at a distance, and speaks to the national significance of the project.

(b) In the USVI only 18 percent (UVI Eastern Caribbean Center (ECC), 2017) of the population is reported to have a bachelor or higher degree. This statistic is nearly 33 percent at the national level (US Census Bureau, 2015). According to the UVI, ECC, 39 percent of the population is over 50 years old. This data is critical because it documents known indicators of low digital literacy and capacity to absorb and apply information; factors that are present in both the local and national populations.

(c) Physical distancing requirements of the COVID-19 Pandemic impose a level of isolation known to be especially detrimental to the mental health of older adults and children. Providing effective technology options for addressing access to healthcare and to connect with others for reducing levels of isolation are also factors that speak to the national significance of this project. Studies of the cognitive performance of the senior population revealed that 25 percent of participants perform better after learning to use social media tools such as Facebook (Biss, et. al., 2013). This project will model effective strategies for engaging communities in a manner that could reduce the major issue of isolation resulting from the COVID-19 response that is now commonly reported on the national level. Prior to COVID-19 as well, seniors commonly experienced conditions that left them isolated from families either by residing in distant locations or through the absence of sufficient opportunities for socializing. The project can be beneficial as a lifelong strategy for improving communication access and convenience for social interactions.

2. To assess the need for partnership in this project, in 2020 UVI Librarians collaborated with community groups from a wide variety of service areas across the Territory on the islands of St. Thomas and St. Croix, to identify opportunities for resource-sharing. The partners included: healthcare providers supporting at-risk and health-compromised individuals seeking safe access to effective healthcare and health information; and social support networks including faith-based services, recreational groups, and personal development outreach. These groups all reported challenges for members to pivot effectively to the digital options for receiving continued services and support, further detailed below in the description of the community targeted for the project.

3. An alternate solution for in-person technology support on UVI campuses was identified by librarians and IT staff in a February 2019 UVI needs assessment survey of 113 students. (Supportingdoc1) The virtual helpdesk was ranked among the top five solutions as a long-term strategy for remote user satisfaction. Recent data in 2021 from Comm100 Network Corporation posted by Steven MacDonald in SuperOffice blog shows reduced levels of customer service response time for live chat interactions compared to response times for phone or email interactions. Survey results show customer satisfaction with chat interactions through a virtual helpdesk at 82 percent compared to 61 percent for email interactions and 44 percent for phone interactions. The virtual helpdesk strategy is not currently used in the USVI for technology support. Using distributed support of librarians and community partners for the virtual helpdesk schedule has significant potential for informing national rural IT customer service strategies for similar underserved communities in addressing technology support.

Complementing/Building Upon Existing Practices

The project builds on expanding community outreach practices of innovative academic libraries as reported by Steven D. Shapiro in the 2016 New Review of Academic Librarianship. Shapiro cited ALA's

“Trends in Academic Libraries” reporting a 20.9 percent drop in circulation over a 10-year period; and as much as 63 percent decline in reference activity for libraries in Ivy League institutions from 1996-2006. In response to this shift in behavior, innovative academic libraries such as the ones at University of Denver, Wake Forest University, and North Carolina State University have implemented programs to attract users from surrounding communities. The programs offered include lecture series; innovation centers with 3-D printing resources, and technology device lending; and art exhibitions. This is a departure from the traditional role for academic libraries. While support for community lifelong learning projects usually falls within the purview of public libraries, we believe that the circumstances surrounding the digital divide and COVID-19 pandemic are not usual, and require an extraordinary, “all hands on deck” response. USVI public libraries have expressed support for this proposed community training project led by the UVI academic libraries as documented in the attached letter of support. (Supportingdoc2) The project expands the practices of library/community partnerships for lifelong learning by creating a network of nine (9) partners that will enrich the learning community model in academic librarianship, and expand the pool of strategies available to academic libraries on a national level.

Project Design

The proposal seeks to address healthcare and information seeking activities using a train-the-trainer model by building effective technology skills for telehealth and information access. University and community partners will collaborate to address IT service and support efforts to reinforce the skills through a virtual helpdesk solution. The project will develop technology skills and provide resources that enable the project partners to sustain project benefits and continue their own development into the future. The participants targeted include stakeholders served by UVI Libraries and members of the nine (9) community partners. The project will be conducted over a two-year period using a three-pronged approach.

Project Goals

The goal is to develop transferrable digital and information literacy skills that support telehealth services, current physical distancing requirements of COVID-19, and future electronic communication needs through the following objectives.

1. Develop the capacity for at least 200 clientele of targeted community groups to use technology as a resource for retrieving information and for receiving telehealth care by July 2023, through:
 - train-the-trainer preparation among nine (9) community partners to ensure ongoing access to skill development
 - delivery of training for smart devices to build transferrable skills
2. Provide resource support through University and community organizations by 2023:
 - assigning 15 percent of a full-time librarian: to develop resources and manage the proposed project
 - appointing two (2) part-time librarians to support project administrative and training needs
 - appointing a part-time IT specialist to support the implementation of the virtual helpdesk application
 - providing stipends for nine (9) community partners to encourage leadership to support continuing development of target populations, and to provide active participation for feedback and advisory roles
 - engaging an external review team to provide comprehensive project evaluation
3. Address the need for effective remote communication for at least 1,000 persons (including students and community users) by July 2023 through:

- implementation of a new virtual helpdesk solution on both UVI campuses
- establishing support for users through orientation sessions

Project Management – Schedule and Resources

The following details address the sequence in which activities will occur, personnel involved, input of resources, project management activities, roles and responsibilities, project schedules, measures of success and anticipated results, and methods for sharing outcomes.

1. August 1, 2021-July 31, 2023 – Build capacity for using information/telehealth resources.

Librarians will develop training resources for agency participants and for train-the-trainer preparation and participation; and along with the trained community partners, will provide basic digital and information literacy training around use of smartphones and tablets to access telehealth and other virtual platforms, – such as Zoom, Free Conference Calling, Teams, or Skype, with intent to build transferrable skills for using new applications. The project team consisting of the project director, UVI librarians, IT staff and community partners will:

- Announce the grant award through at least three (3) press release outlets at regular intervals to achieve project promotion and encourage community partner recruitment.
- Identify and deploy the project teams to clarify collaboration and train-the-trainer roles to achieve agency buy-in.
- Schedule planning meetings with community partner leaders so that at least seven (7) of the partners are actively involved in at least 10 meetings providing feedback and refining project focus.
Collect information for virtual access needs specific to partner community to ensure our materials/sessions address specific requirements, in the area of telehealth, for example.
- Develop training scope and materials using a combination of unique materials specific to our community and materials freely available online. Materials will be sourced from: ALA's Digital Materials and ALA's Literacy Clearinghouse Digital Learn (which provides adaptable resources).
- Finalize train-the-trainer curricula and community partner training materials. Librarians anticipate delivering 5 hours of in-person training to develop trainers during 2 weeks. Schedule will be adjusted based on learning.
- Identify training dates to confirm training sites and logistics and to recruit community partner trainees.
- Register participants and deliver at least 5 training sessions to at least 50 participants in the first month of training. Trainers anticipate presenting one-hour, in-person sessions, and will assess learning outcomes to determine schedule for introducing virtual session as skills are strengthened. Some groups will be a mix of youth and senior participants, providing opportunity for peer and intergenerational interactions.

2. August 1, 2021-July 31, 2023 – Provide resource support through UVI and community groups.

The project appointees will include one part-time online resources librarian, two part-time instruction librarians and one IT specialist for virtual helpdesk development and support. This team will engage project partners to provide project administration and assessment that address challenges and integrate partner input by:

- appointing an online librarian to develop training materials and manage training and outreach in collaboration with community partners

- appointing two (2) part-time librarians for project support, delivery of training, delivery of training assessment and development of reports
- appointing an IT Technician for virtual helpdesk support and training of trainers
- convening and deploying a partner advisory panel/team comprised of at least five (5) active community partner leaders to provide input for project delivery and framework for sustaining project impact within their community
- providing agency stipends to encourage partner leadership and establish framework for continuing partner support
- conducting comprehensive project evaluation using three or four (3 or 4) librarians or other relevant educators from the active and retired professional support pool. These external evaluators will provide project review and feedback for ensuring project replicability on a national scale
- providing external evaluator stipends
- making project results available on the UVI Libraries web pages
- documenting training experiences, collecting data, reviewing literature and identifying possible conference/publications for disseminating information to national audiences

3. August 1, 2021-July 31, 2023 – The project will ensure effective access for virtual customer support needs. IT staff will select and implement technology support for users through a new virtual helpdesk solution, and will develop orientation/training for community trainers for responding to helpdesk requests from their members. The project team will ensure smooth virtual helpdesk implementation by:

- preparing and orienting the UVI helpdesk team to the project
- selecting helpdesk application (Azure Bot, Wunder365 Bot, Zendesk currently under review)
- developing new application training materials for helpdesk staff and for orientating train-the-trainer participants to support their members through the virtual helpdesk
- developing service desk schedule
- implement and promote virtual helpdesk application
- collecting helpdesk usage statistics to determine measures of success

Assessing Project and Measuring Success

The librarians and community trainers will deliver at least 30 training sessions to at least 200 project participants from the community partner participant pool over 24 months. Participant trainees will receive at least five (5) sessions each with attendance logged, learning assessed, and virtual helpdesk usage surveyed at four-month intervals to determine application of skills for healthcare and other services such as banking and finance, education, social support, to name a few. Health clinics will be surveyed to assess progress of expanding telehealth to project participants. Measures of success will be identified for each activity and analyzed by the advisory/project team. Program adjustments will be made as needed. Helpdesk usage reports will be produced to measure user-type, frequency of use and type of access, and to determine project's success. The project will be considered successful if 60 percent of the 200 participants targeted demonstrate some proficiency for using telehealth or other remote technology services, if six of the nine agency trainers are active advisory panel participants, and if 75 percent of the combined 1,700 UVI students and 200 community project participants are using the virtual helpdesk for related technology support. Project materials and assessment results will be shared at professional conferences and made available through the libraries' website.

A team of three or four (3 or 4) local librarians or educators, who are not directly involved with the project activities will be tasked with project evaluation for comprehensive project review. This would bring

additional professional perspectives in the field to evaluate the effectiveness of project design and execution, while providing feedback and recommendations for improvement. The team will review the skills, applications and related resources that form inputs for the project; assess efficacy of the activities performed by trainees to acquire technology skills; assess the achievement of objectives for engaging in telehealth and communication events, and determine the impact of the overall project for impacting lifelong learning.

Deploying Project Staff and Collaborators

The staff responsible for development and delivery of the project is highly qualified and uniquely positioned to ensure effective implementation for project success. Staff is comprised of professional librarians with extensive teaching and instructional design experience as documented in the attached resumes. UVI IT professionals are responsible for supporting the UVI helpdesk, and currently provide support services for University desktop systems and classroom support, and communication systems for voice, data, and access to global computing networks. The proposed project team will have the capable support of trained professionals to ensure project success.

Collaboration with community project partners for the identification of the training solution, in developing skills to deliver training is a strategic technique. By collecting feedback from the community partners as well as trainees, we ensure full engagement of targeted groups and buy-in for project success. The 5–7-member advisory group will be recruited from among the project community partners. Unlike the project evaluation team that will provide a one-time comprehensive review, the advisory group will work directly with their own stakeholders. The advisory group will perform the regular (four-month) learning assessment, identify logistical or training challenges for the new trainers, and provide regular feedback to librarians and IT staff. Results of the four-month assessments and other advisory group reports will contribute to program materials for the comprehensive evaluation. The creativity of the academic library community outreach solution, the demonstrated level of staff expertise, and the targeted resources and strategies to be deployed among multi-type project partners, mark this project as a uniquely interesting and highly innovative model for national institutions to follow.

Community Targeted for the Project

This project targets a disadvantaged and underserved population. According to the U.S. Virgin Islands Kids Count Data Book 2019, reporting data for 2015, 30 percent of children in the Virgin Islands live in poverty, compared with 13.5 percent of children nationwide; 68 percent of Virgin Islands children live in single-parent households, compared with 34 percent of children in the U.S.; median family income is \$43,731 compared to \$56,516 for the US. (For income earned in 2014). From the 2010 U.S. Census, the population is reported at 106,405. The population composition is 77 percent Black, 9 percent White, and 14 percent Other. Approximately 18 percent of the population is of Hispanic origin with the majority of residents on St. Croix, where the Hispanic population is 25 percent.

Project partners comprise multi-generational members drawn from the following organizations: (a) African Diaspora Youth Development Foundation (ADYDF) – a children and young adult cultural education group with 20 members, (b) ETA Phi BETA Sorority with 20 members – committed to general development of adults, youth and disabled persons, (c) Family Resource Center, a non-profit entity serving victims of domestic violence, variable membership (d) Frederiksted Health Care – a community-based, non-profit, primary health care center with 7 service delivery clinics, serving over 1,300 patients on St. Croix monthly, (e) iMaster VI, a personal development program for plus sized high school girls with 23 members, (f) The Methodist Church, St. Croix Circuit, with over 200 overall members at three sites across the island, (g) Nuff Respect Basketball Youth Club, a youth mentoring and training group, 60 members, (h) Massey’s Soccer Academy, building educational and developmental skills of high school students, membership varies, i) St.

Thomas East End Medical Center – a primary healthcare facility serving over 500 persons monthly on the island of St. Thomas.

Among the partners, administrators at the Frederiksted Health Care, St. Croix and St. Thomas East End medical centers point to patient reluctance to engage with health professionals at a distance, for the same questions that would be answered willingly in a face-to-face interview. The level of user expertise and lack of varied experiences with technology that build comfort for receiving telehealth services, create further disadvantages for the underserved populations. The social support organizations report additional behavioral challenges among membership resulting from COVID-19 response. Coming back from lockdown where children and youth had limited extra-curricular stimulation for development, and had experienced/witnessed violent encounters in their home environment, the support groups are eager for opportunities to build skills for continued growth in adapting to the COVID-19 reopening, and to affect lifetime experiences. Faith-based organizations used digital media for continued socialization of members with mixed results that starkly illuminated the disparities in digital proficiency. These are the same experiences encountered in offering social support information and healthcare resources for their members.

The wide variety of project partners, who serve more than 2,000 clients along with the 1,700-member UVI student body and 500-member University community, will comprise the pool of participants to benefit directly or indirectly from this project. Direct benefit will be achieved through training and improved access to healthcare and information resources, virtual access to technology support, and capacity-building for future growth. Indirectly, the project benefits the library and university community through the familiarity and goodwill created by the interactions for sustaining project benefits and for future collaboration. Both direct and indirect outcomes will model significant opportunities for developing the communities in which all libraries operate.

Diversity of Targeted Stakeholders

The nine (9) partners comprise groups that bring a wide variety of interests and experiences. While they may share a common heritage, their composition represents focus areas that vary widely. Healthcare access is the main concern for the senior component, with social and educational development being the focus for youth and young adults. Others share interests that intersect in all these areas, which are prime cross-disciplinary avenues for lifelong growth and development.

The majority of the population of the USVI are descendants of African slaves brought to the Virgin Islands during the slave trade or later migrating from many other Caribbean islands, including Puerto Rico, Trinidad, Antigua, St. Lucia, and Dominica – to name a few – each with variations in language, cultures and traditions. Residents also come from many parts of the U.S. Mainland and Palestine. The geographic distance from metropolitan locations for resource-sharing introduces challenges that are common to rural areas. These challenges include limited opportunities for networking with colleagues in similar professions, as well as the high cost of travel to the U.S. Mainland for access to critical resources. The project seeks to develop the capacity for clientele to use technology resources that are becoming increasingly available through publicly supported Broadband projects, for receiving telehealth services and for retrieving information. The strategies using train-the-trainer methods; forming an advisory group among participating partners to provide leadership, feedback and support; and providing outreach for virtual IT-related support could have broad national appeal for other rural communities, or communities with similar demographic composition, or with limited local professional networking opportunities.

National Impact

Through strategic collaboration with the community partners, this innovative project expands the boundaries in which the libraries operate. The project design is easily transferrable as a model for addressing critical usage and relevance issues facing academic libraries. Curriculum design and training materials produced will model professional practices and will be tangible products to be updated and accessible through the Libraries' web presence. Organizational contacts established for collaboration will be maintained and developed for future community partnership. Community partners who are trained to provide support to their members through the virtual helpdesk, expand capacity of these organizations for self-sufficiency. Like the development of training materials, virtual helpdesk solutions will model professional IT practices.

Making Project Results Available

As a national model, the project will demonstrate peer and inter-generational connections as an instructional strategy. Some participating groups will be integrated for training allowing youth and seniors to be paired within their age groups or across age groups for instructional activities. The project will function as a learning community for digital and information literacy training, bringing together persons from a variety of backgrounds. The cross-section of partners provides opportunities for opening pathways to communication, where participants may benefit not only from the acquisition of new skills, but also from the reduction of social isolation. Interaction among the groups can lead to sharing of resources, exchanging of traditions, documenting of cultural heritage and explaining identity for a more integrated local community. The project design could demonstrate novel leadership opportunities for academic libraries to benefit similar demographic and rural communities in creative and stimulating ways.

Training outcomes, telehealth, telecommunication, virtual helpdesk usage data, and external evaluation reports will be shared with the participating agencies and made available through the Libraries web pages. Further, these reports will be integrated into professional research projects and presented upon acceptance at national and regional conferences. Scholarly trend literature and national professional conferences in both Library and IT fields are accessible avenues for making project results available. The relevance of academic library community outreach and virtual professional IT community outreach in national professional conversations make this initiative an attractive topic for inclusion in professional development discussions. As the Librarians seek partners at other academic institutions for collaboration and sharing project results, there will be opportunities to disseminate project results and impact professional practices at the national level. The HBCU Library Alliance is a key partner organization within which this model may be easily replicated. Those institutions in the Alliance in remote communities may find this a valuable option for serving persons outside the University.

The UVI website will be a repository for training materials and project reports, making the model details widely accessible for academic libraries. The benefit of maintaining an engaged group of community partners on the advisory panel has many benefits including: ensuring alternate avenues for dissemination of information, availability of community partners for other departmental projects and research studies, as well as providing options for new UVI student recruitment and engagement.

Sustaining Benefits

Through train-the-trainer sessions, community partner leaders will develop skills for sustaining client development and for continuing IT support through the UVI virtual helpdesk. The project will strengthen the University's existing contact with community organizations and provide opportunities to expand such interaction to other UVI groups. Through continued use of the virtual helpdesk for community support, librarians will be able to identify and guide ongoing community training needs. Support for the virtual

helpdesk application will be managed by the University's IT department through its regular helpdesk and technology support operations described in the section on deploying project staff.

The advisory group drawn from members of the targeted community ensure thorough understanding of the project among participating group leadership. Through this understanding of the training and project execution, community partners can continue their own development for program planning and delivery. Project partners will be encouraged to commit to sustained collaboration with the University libraries as a foundation for future partnerships. Through the appointment of an external expert team of librarians/educators for comprehensive project evaluation, the project will benefit from independent review that informs the development of the framework for future training and outreach projects. Both the community partner advisory panel's feedback and the external evaluation team's comprehensive review report will ensure the integration of input for validation and consensus-building.

The project has potential for sustaining benefits at the individual participant level as well. Patients who are more proficient at finding information quickly and easily through online resources, and are comfortable using FaceTime, Zoom or other communication tools are also more likely to accept telehealth services and participate effectively with healthcare providers at a distance. At this time when access for answering COVID-19-related questions is so critical for containing the virus and reducing the development of variants, increasing patients' ability to reach a healthcare worker goes a long way in accessing vaccines, and reducing anxiety and virus spread. The added availability of a virtual helpdesk, and trained community members for helpdesk support within their affiliated groups greatly extends the benefits and project maintenance for individuals.

The training aspect of the project has the potential for impacting behavior far beyond telehealth. It builds a network of community users for peer-support, strengthens the community bond with UVI Libraries for information-seeking, and increases the levels of expertise available for deployment within the partner agencies and beyond. Adults and youth who develop effective IT and information-seeking skills would be able to develop digital literacy for navigating a wide variety of other systems for banking, shopping, and school activities. These skills increase effectiveness of individuals in dealing with challenges of daily living now and in the future. Additionally, the ability to access resources virtually is beneficial when organizations are generally reducing in-person services. For example, banks encourage the use of mobile devices, instead of in-branch transactions. In the Territory, banks have reduced locations, promoting mobile services and ATMs. The comfort with technology and skills learned in this project will help a wide cross-section of the community to succeed with this changing landscape.

By developing technology skills for telehealth care and information-seeking through training across a broad spectrum of the underserved population using a novel collaborative approach, this project has potential as a powerful model for addressing technology gaps within underserved communities in which many academic libraries reside. It offers a model for sustaining technology training benefits using a virtual IT helpdesk supported by community trainers, and for nurturing organizational contacts through the same IT helpdesk, that can be maintained and developed for future partnerships. It incorporates inter-generational users for socialization and peer-support, strengthens the community bond with academic libraries for information-seeking, and increases community expertise for deployment within the partner agencies and beyond. The project focus is telehealth and health information seeking, impacting quality of health and access to care. Technology use in banking, shopping, and online school activities impact lifespan development for every community served by libraries. This valuable project would demonstrate the potential for far-reaching impact across size and complexity of institutions, by sharing alternate options for expanding academic library community collaboration.



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.

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

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

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.

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.

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.

Workflow and Asset Maintenance/Preservation

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

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).

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).

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

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

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).

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.

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.

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.

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.

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

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

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

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

Access and Use

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

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

Name of publicly accessible source code repository:

URL:

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.

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

A.3 Will you collect any 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.

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

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?

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

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?