

**CARNEGIE LIBRARY OF PITTSBURGH
PROPOSAL TO INSTITUTE OF MUSEUM AND LIBRARY SERVICES
ABSTRACT**

Carnegie Library of Pittsburgh, in partnership with P2PU, Detroit Public Library (MI), Onondaga County Public Library (NY) and Multnomah County Library (OR), propose to implement and develop a set of tools that any library can use to engage volunteers to facilitate peer-led learning programs for adults.

By developing these tools, we aim to provide a training model for non-librarian volunteer facilitators of peer-led learning; a replicable system for managing library volunteers; improved community access to peer-led learning; and a community of engaged learners and facilitators who are connected through a common web portal. Between July 2019 and June 2021, CLP and P2PU will develop draft resources, which will be tested in two rounds in Pittsburgh, Detroit, Onondaga and Portland. The final resources will be published and available for free at www.p2pu.org and at www.carnegielibrary.org.

This project is in response to the community's needs for accessible, high-quality lifelong learning opportunities for adults as well as an opportunity for libraries to increase program offerings without additional staff. The primary audience for this project is potential volunteer facilitators; library staff and community members who will participate in peer-led learning make up a significant secondary audience.

The project will be developed through the following process:

In Phase 1, resources for training facilitators and for library staff to recruit and manage volunteers will be developed, along with new functions on www.p2pu.org to offer libraries tools for a customized landing page and volunteer management tools. During this phase, 10 people in Pittsburgh will be trained using these resources with learning evaluated through Project Outcome surveys and feedback about the experience.

In Phase 2, staff from partner libraries will be trained in the resources, and will then use the resources to train volunteers to facilitate peer learning in their respective library communities. During this phase, we seek to train at least one staff person from each partner library, and will seek to implement a total of at least 20 informal learning programs at pilot sites. Learning outcomes for all learning, including facilitator training and public programs, will be evaluated using Project Outcome Lifelong Learning surveys to measure knowledge, confidence, motivation and awareness of resources.

In Phase 3, CLP will collaborate with P2PU and partner libraries to report, sharing resources, and plan for sustainability. During this phase, we will seek to offer at least three webinars of conference calls and staff from each library will attend at least one professional conference.

Statement of National Need

The Library as a Hub for Volunteer-Led Adult Learning Programming seeks to provide a methodology to help a public library of any size to support adult learning in a range of topics that are responsive to community need without relying on staff or paid presenters to envision, plan, develop and execute programs. Resources developed through this project will enable libraries to leverage abundant learning materials available for free through library collections and on the internet. Using these resources, libraries will also be able to use volunteer capacity to enhance adult programming. This project is built on the framework of the library as a platform which “provides opportunities for individuals and the community to gain access to a variety of tools and resources with which to discover and create new knowledge.”

Carnegie Library of Pittsburgh (CLP), in close partnership with Peer 2 Peer University (P2PU) and a diverse set of library partners, aims to accomplish these goals by completing the following work:

- CLP and P2PU will design consistent, high quality training for non-librarian facilitators who are running peer-led learning. P2PU will lead development of this training material, and resources will be tested and refined at project team libraries.
- CLP and P2PU will develop resources to support efficient and effective volunteer recruitment and management in libraries. CLP will lead development of volunteer-support resources, which will also be tested and refined by project team libraries.
- CLP and P2PU will support increased access to lifelong learning opportunities for library users through library staff professional development and marketing content. P2PU will create new functions on www.p2pu.org to support recruitment, training and engagement with volunteers at any library, and CLP and P2PU will publish all resources for any library to adopt.
- CLP, P2PU and partner libraries will establish engaged communities of learners and facilitators in local communities and online.

Carnegie Library of Pittsburgh (CLP) has identified interest-driven learning as a key focus area in its 2018-2022 Strategic Plan. Relatively flat funding and many other demands on staff time mean that it is imperative to find efficient ways to increase in-demand programming. P2PU, a national leader in adult informal education, has found that limited staffing, ad hoc relationships with volunteer communities and a historical emphasis on just-in-time learning (rather than scaffolded learning that occurs through repeated visits) all contribute to an underutilization of the library as a hub for informal learning. Partners at Detroit Public Library (MI), Multnomah County Library (OR), and Onondaga Free Library (NY) have all worked with P2PU to implement learning circles and have identified a need for tools to train volunteers to facilitate learning.

There are two core elements to this project – enabling libraries to increase programs without increasing staff, and enabling libraries to support community-identified learning needs.

We believe that supporting volunteer facilitation of learning in libraries is important because:

- Nationally, the number of public library staff has decreased in the past decade, while visits to many libraries have increased.
- The public recognizes the importance of the library as a public space to pursue lifelong learning in a broad range of subjects.
- Programming is increasingly a priority for libraries as collections usage declines; according to recent PLDS data, per capita library programming increased 27.5% between 2012 and 2016.
- Volunteers are motivated by social affiliations, personal values and beliefs, advancement of career related skills, and recognition or praise. Libraries that meet these needs provide an essential service to those volunteers.
- Research suggests that adopting new approaches to adult learning may alleviate some barriers faced by learners in a traditional classroom context.
- The library is well-positioned to serve a variety of populations, each of which recognize the importance of lifelong learning and are looking to the library for support.

This project aims to build on CLP's success in organizing volunteers to deliver high quality programming and on P2PU's success in creating and convening communities interested in informal learning.

National Leadership Grant, Project Grant Category Rationale

This proposal is for a National Leadership Grant under the Project Grant category. This project addresses the Project Grants category in the following ways:

- The project will develop tools to enable libraries to increase adult learning, implement those tools in a representative group of public libraries, and will evaluate the effectiveness of those tools to inform further development.
- This project combines elements of existing practices at CLP (volunteer-led programming), P2PU (informal adult learning), and partner libraries (learning circles) and represents a new development in these areas. This work will enhance existing practices through the production of an implementation guide for new locations and growth and improvement in places where informal learning already exists.
- This project involves an ongoing development process, with evaluation and refinement at each iteration. The deliverables will be tested in a variety of environments to maximize applicability across the sector.

Project Design

This project aims to build on volunteer development practices that have been developed at CLP and approaches to organizing and building community around learning that have been developed by P2PU.

This project builds upon CLP and P2PU's work to date. CLP has had promising early experience with volunteer facilitators for programming for youth and adults, exemplified by two of our volunteer-led programming initiatives, On-Ramp to Python and Reading Buddies. On-Ramp to Python is a six-week coding workshop facilitated by volunteers who are motivated by sharing their knowledge with other people; this enthusiasm, in turn, results in strong participant outcomes. Our Reading Buddies initiative, in which adult volunteers receive training in basic early literacy skills, engage in positive

interactions with youth, grow their skills through technology mentoring, and become more knowledgeable of library resources, has rapidly grown. Its success is largely due to two factors: it offers a flexible, social volunteer experience, and the skills that volunteers learn allow them to have positive impact on the children they encounter in libraries.

P2PU has similarly pursued an innovative pathway for informal learning. Learning circles began at Chicago Public Library in 2015 with a grant from the Knight Foundation. Because the program was designed, in part, to serve as professional development for Chicago librarians, volunteer facilitators were not initially included. As P2PU has subsequently expanded to more library systems, capacity has proven to be a barrier to some libraries that are interested in growing learning circles. This limitation is especially felt at rural libraries and small branches. Research on learning circles has demonstrated the importance of the library as a site for informal learning and that there is a core skill-set that facilitators can develop to be most effective.

This project will allow CLP to develop a standard and replicable training for volunteers who facilitate learning in libraries, and will enable P2PU to offer a valuable set of resources to libraries wishing to implement learning circles, but that are limited by staff capacity. Partner libraries will have input on a set of tools that they can use to expand their implementation of learning circles and adopt for use in other informal learning programs. The table below provides an overview of the four primary goals of this project, established above, with related deliverables and activities.

Goal	Deliverables	Key Activities
Consistent, high quality training for non-librarian facilitators who are running peer-led learning.	Training materials, including video, written material, and group activities, covering adult learning, facilitation, and related topics.	Write/record facilitator training content. Develop P2PU website to incorporate new material.
Efficient and effective volunteer recruitment and management in libraries.	Documentation and training materials to enable any library staff to efficiently recruit, train and support volunteer facilitators in a variety of learning modes. New functionality on P2PU’s website to offer any library a local page with volunteer recruitment tools, custom information, and quality assurance.	Write staff guide content. Develop P2PU website to include volunteer entry point, and customization of location landing pages. Design and implement an appropriate credentialing method for volunteer facilitators.

<p>Increased access to lifelong learning opportunities for library users through library staff professional development and marketing content.</p>	<p>Professional development sessions to enable project team staff to learn to support volunteer-facilitated learning in their communities.</p> <p>Marketing content templates for social media, newsletters, and talking points to allow libraries to communicate the value of peer-led lifelong learning to local communities.</p>	<p>Adapt facilitator training and staff guided content to in-person professional development.</p> <p>Schedule and host professional development sessions in Pittsburgh.</p> <p>Organize webinars and/or conference presentations for a national audience.</p> <p>Write marketing content.</p> <p>Publish all resources at www.p2pu.org and www.carnegielibrary.org.</p>
<p>Engaged communities of learners and facilitators in local communities and online.</p>	<p>Local communities of learners and facilitators in Pittsburgh, Detroit, Multnomah and Onondaga.</p> <p>Connections to online community at www.p2pu.org with access to global community of lifelong learning advocates.</p>	<p>Implement guidelines for engaging with volunteer and user communities at all project sites.</p> <p>Use Community section of www.p2pu.org to share resources and discuss volunteer-led learning.</p>

Detailed Project Timeline

Phase 1 – July 2019-Feb 2020: Planning and Development:

In Phase 1, CLP’s Adult Programming Coordinator, Volunteer Services Coordinator, and Communications and Creative Services Department will collaborate with P2PU staff, frontline staff at all pilot library locations, and volunteers from local communities to develop the foundational elements that will support the rest of the pilot.

During this phase, we will seek to train at least 10 people (5 staff, 5 volunteers) in at least two CLP locations.

Activities during this phase include:

- **Develop Facilitator Resources and Staff Handbook.** The Facilitator Resources will focus on methodologies for facilitating adult learning in a variety of peer-led modes, including group-skill shares, discussion group topics, learning circles and one-on-one-mentoring relationships. The Staff Handbook will focus on volunteer engagement and methodologies for adult learning and will include recommended strategies for volunteer recruitment, recognition, retention and support. Both guides will incorporate a diversity plan, including information about focusing on audiences, cultural considerations in informal learning, and strategies for recruiting participants and volunteers of color. P2PU will lead development of Facilitator Resources; CLP will lead development of the Staff Handbook.
- **Train Staff and Volunteers in Pittsburgh** – CLP and P2PU will use the strategies in the Facilitator Handbook to recruit and train community volunteers, and to prepare frontline staff for their roles and responsibilities in the context of this programming model. Replicable materials, including volunteer position descriptions, training scripts and presentations, will be created at this stage.
- **Develop initial Marketing Content** – CLP's Office of Communication and Creative Services will develop replicable print and digital materials to market the programs to participants. Potential volunteers will be designated and tested at this phase.
- **Prototype Programming** – The final element of the first phase of the pilot is to launch prototype programming at a representative group of CLP locations. Once completed, this prototype programming will be evaluated using the Project Outcome system to collect data on the project staff experience and volunteer-facilitator experience. Data collected during this phase will be used to revise or refine resources before the launch of Phase 2.

During this phase of the project, financial resources from this grant will be leveraged to engage the services of P2PU, purchase technology and implement the first stages of an overall marketing plan.

Phase 2– February 2020– December 2020: Pilot Expansion at Partner Libraries

The work in Phase 2 revolves around CLP's core project team continuing its collaboration with P2PU and deepening that collaboration by connecting with partner libraries to expand and further test the Phase 1 work.

During this phase, we seek to train at least one staff person from each partner library, and will seek to implement a total of at least 20 informal learning programs at pilot sites.

Activities for this phase include:

- **Visits from Partner Libraries-** Staff from partner libraries will visit Pittsburgh for a facilitator training program led by CLP and P2PU. This training will include an overview of our informal learning educational philosophy, hands-on time with the P2PU platform and a thorough review of the programming model developed and tested in Phase 1.
- **Launch of marketing plan** - Based on the marketing developed in Phase 1, partner libraries will launch use of templates to implement marketing plans including content about informal learning and calls to action for both volunteer applicants and program participants.

- **Launch of volunteer-led informal learning** - From April 2020 – December 2020, partner libraries will launch their pilot programs. During this timeframe, partners will conduct volunteer recruitment and training, continue marketing efforts and engage adult learners from local communities in programming. CLP and P2PU staff will conduct regular calls and will be available for brainstorming, troubleshooting or other support throughout this phase of the pilot.
- **Evaluation and refinement**- As with Phase 1, this phase of programming will be evaluated using the Project Outcome system to collect data on the project staff and the volunteer-facilitator experience.

During this phase of the project, financial resources from this grant will be leveraged for training and travel expenses, marketing, and technology. Please note that although Detroit Public Library is included as a partner in this testing phase, they have elected not to receive a stipend or reimbursements from this grant project.

Phase 3 – Jan 2021-June 2021: Revise, Refine, Publish

The final phase of this project is focused on reporting, sharing resources, and sustainability.

During this phase, we will seek to offer at least three webinars or conference calls and staff from each library will attend at least one professional conference, with the anticipation of presenting this work to our colleagues.

Activities during this phase include:

- **Sustainability Planning** – Staff from CLP and partner libraries will collaborate to institute a formal system for continuous follow-up, evaluation, and iteration over the long-term.
- **Publishing Findings** – Project staff will publish all publicly-relevant deliverables to P2PU and CLP websites. At this time, the project team will also develop a report to IMLS.
- **Sharing at Conferences** – The project team will seek to have project findings included in the program of professional conferences.
- **Developing a Webinar** –The project team will develop a presentation to provide an overview of project deliverables and will seek to offer that training as a webinar through professional networks and through P2PU network calls.

During this phase of the project, financial resources from this grant will be leveraged for travel expenses and costs associated with development of training and webinar materials.

This project will begin with and test the following assumptions:

1. **The skills required to be an effective learning circle facilitator will translate to other forms of informal learning.** Learning circles have been the subject of several research studies; this project will attempt to generalize those findings to related learning models.
2. **Community members will be interested in a volunteer position as a "facilitator of lifelong learning."** CLP's experience with Reading Buddies and On Ramp to Python indicate that we can recruit and retain volunteers for targeted programming. This project will focus on recruiting volunteers with a broad interest in learning and a motivation to help others learn.
3. **Community members will seek to organize themselves into learning groups.** Library-determined programming tends to follow established patterns (e.g., digital literacy, job and

career, book clubs). This project relies on community members to assert their learning goals and to take steps to organize themselves into learning communities.

4. **Resources--especially those available online and free--will be available for topics that match community interests.** Librarians are highly qualified to identify and collect high-quality information resources.

Risks that we are monitoring include:

1. **It is challenging to bring attention to and build audience for any new endeavor.** We seek to meet this risk by establishing a clearly articulated value proposition that we will use to identify people who will be interested in participating.
2. **Informal learning may not be sufficient to meet the needs of people who have significant barriers to learning.** This project will recognize that external or internal barriers to learning may require more skilled intervention than can be expected from community facilitators. The project team will seek to build pathways to appropriate learning opportunities when needed.

Audience

The primary audience for this project is potential volunteer facilitators. This audience can be broadly described as adults in the community who are motivated to help others learn and who are able to commit time to volunteer service. Within this broad audience, this project will have a special emphasis on volunteers from historically marginalized communities; this is covered in more detail in the diversity plan below.

Volunteers engaged in this project during the prototype and pilot phases will be explicitly tasked with providing user experience feedback as an element of their volunteer service. This feedback will be collected using informal and formal methods. The facilitator training materials will include participant surveys to solicit ongoing feedback from each successive group of trainees, and the year-long pilot will allow for continuous revision based on that feedback.

In addition to individuals within this primary audience, this project is particularly interested in identifying and engaging with groups that we may want to solicit for volunteer facilitation, including groups that represent potential volunteers like AmeriCorps, and also mission-driven organizations who might view facilitation in a particular course as beneficial to their mission.

An important secondary audience for this project, and the ultimate audience for the finished content, are the adult community members whose learning will be facilitated by trained volunteers. Community input is an integral part of the informal learning. This input can include interactive displays in libraries, functions built into the P2PU web platform, social media interaction to determine learning topics, facilitator best practices to tailor learning to each individual group and to adjust the learning environment based on ongoing feedback, and a cycle of ongoing engagement with existing groups wishing to continue learning or to address another topic.

Measurement and Evaluation

This project will include an evaluation component during each project phase. We will evaluate three major components of the project: The effectiveness of the Facilitator Handbook and other deliverables; the experience of volunteer facilitators; and the experience of learners in volunteer-led sessions.

The method of evaluation for each element is outlined below:

Facilitator Resources	Facilitator Experience	Learner Experience
User testing during prototype and pilot	Post-training learning outcomes survey from volunteer trainees (Project Outcomes Education and Lifelong Learning)	Post-learning-session learning outcomes survey from learners (Project Outcomes Education and Lifelong Learning)
Post-training satisfaction survey questions from volunteer trainees	Additional survey questions after each informal learning session about the facilitation experience.	Additional custom questions about experience of having a volunteer facilitator.
Staff survey of project team		

The project schedule includes an early prototype period to allow for an initial revision of the training framework. An extended pilot period will offer opportunities for continued refinement based on input from our broad group of stakeholders.

Sharing Findings and Deliverables

The deliverables of this project will include a full set of resources for libraries to use to support their informal learning goals that will be shared widely in the following ways:

- **Published Resources** The full toolkit will be freely available at www.p2pu.org and www.carnegielibrary.org.
- **Conference Presentations** – Pilot staff will collaborate to identify and assess potential conference venues to present on report's findings.
- **Webinar Development** – Pilot staff will adapt material from the initial handbook, final report, and conference presentations into an effective webinar via the P2PU network and/or through library professional development channels.

Diversity Plan

The diversity plan for this project will focus on Pittsburgh's population as the primary test site. CLP's primary service area is the City of Pittsburgh, which has a population of approximately 302,400 people. The population is 66% white, 23% African-American, 5.6% Asian, and 2.9% Hispanic/Latinx. 22% of the local population of the city lives at or below the Federal Poverty Guidelines. CLP firmly believes that the library's patron base should be reflective of the population and recently added Diversity, Equity, and Inclusion initiatives in the organization's current (2018 – 2022) strategic plan, which is a commitment to embody inclusion and equity in our services, staff, programs, and collections. This pilot will operate in line with those strategic priorities.

This project will address systemic racism by locating at least one pilot location in a traditional community of color and will utilize outreach methods recommended by the American Library Association including: "promoting library services through the communication channels and community events organized by people of color" and "investing in recruitment strategies that build a diverse staff [and volunteer base] so that all people see themselves represented in the administration, management, and delivery of library services."

Further, this pilot will address common barriers to access by ensuring that all programming is free; technology equipment and learning materials are provided; topics are designated by participants; and free, accessible programming for children and teens is co-located in all library spaces, which can eliminate barriers for parents and caregivers.

Community involvement in planning programs will encourage diverse experiences and viewpoints and will not be limited to the institution's choices, which may reflect the viewpoints, values, and biases of the staff of the organization but not necessarily those of the community-at-large.

National Impact

This project's deliverables will include a complete guide to utilizing volunteers for informal adult learning published to the P2PU and CLP websites and in other appropriate channels. Tools will include:

- Facilitator training materials
- Handbook for staff managing volunteers
- Sample marketing content, including resources for obtaining community input
- Evaluation guide
- Archives of webinars and other training material developed in this project.

These tools will be freely available and will enable libraries of any size to recruit and train volunteers for adult programming. Based on interest expressed at the 2017 P2PU summit in Kansas City, several libraries that are currently offering learning circles may utilize these materials to expand offerings; through marketing and publication of this methodology, additional libraries will have increased capacity to offering informal learning on a variety of topics based on community interest.

Project Adaptability and Sustainability

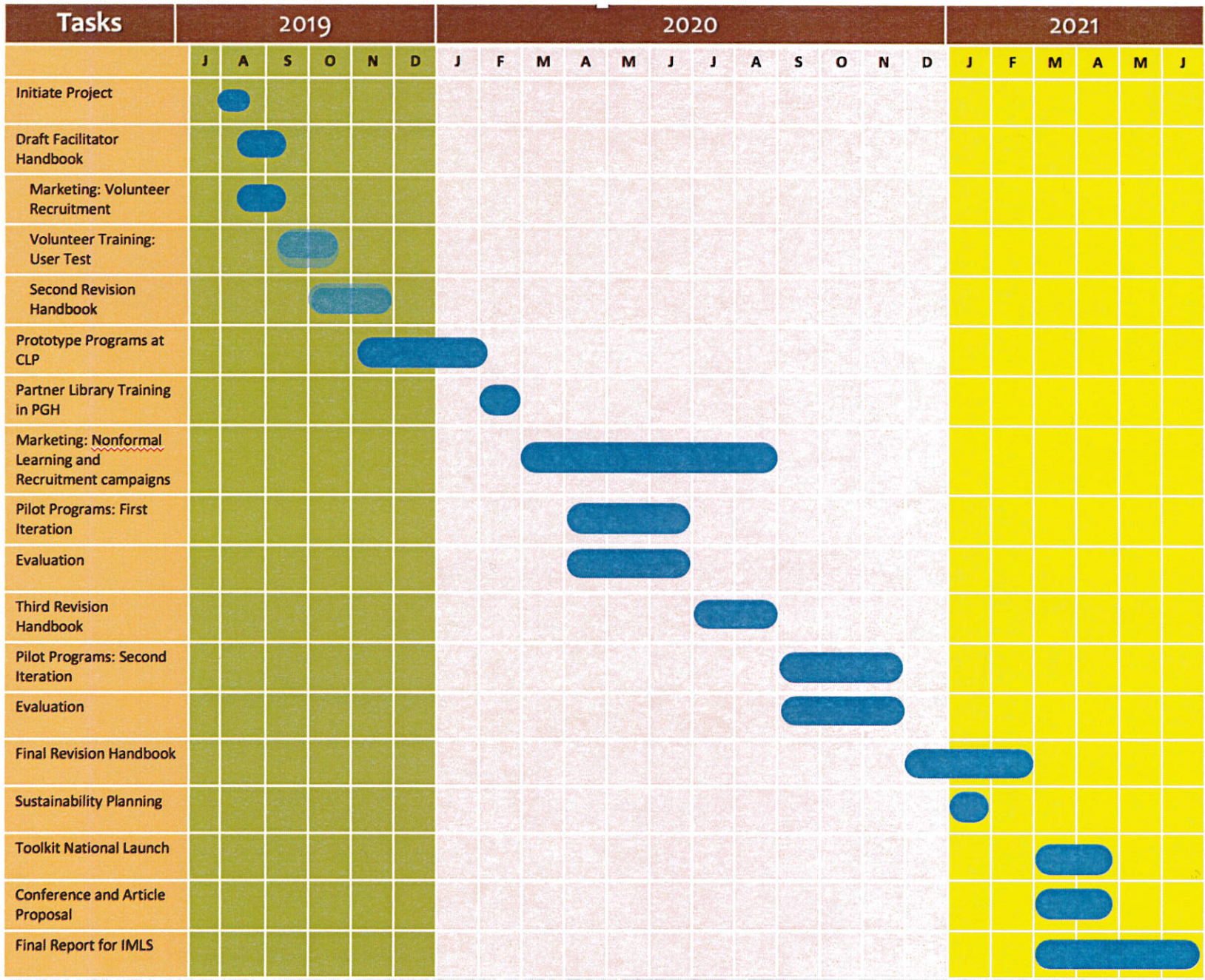
Project deliverables will undergo testing during prototype and pilot phases at several partner libraries, so the final product will be developed with input from a representative group of libraries. Once implemented, it will be minimally expensive to maintain these tools on the P2PU web platform. CLP is explicit in its Strategic Plan about its commitment to sustaining both lifelong learning and a culture of volunteering.

P2PU will maintain the Facilitator Handbook and other deliverables as a resource to support implementation of volunteer-led adult learning programs. These additional resources for libraries will provide P2PU with an additional tool to expand to libraries that may not otherwise have had the ability to support such programming. P2PU will continue marketing and supporting the Facilitator Handbook to the library community.

CLP has committed to providing hands-on, interactive learning opportunities for work, life, and educational goals, and tools and practices developed through this project will be incorporated into our operational plan for existing volunteer-led programming initiatives and will be instrumental to the growth of programming. CLP will continue to contribute writing expertise and assist with development of conference presentations as programming efforts evolve.

Partner libraries will carry forward the training in informal learning techniques and in volunteer engagement, which will serve them if they choose to continue working with volunteer facilitators for informal learning.

All resources will remain freely available for any library to apply, adapt or build upon to suit current needs.





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.

All digital products created during this grant will be published online under the Creative Commons Attribution-ShareAlike 4.0 International license (CC BY-SA 4.0), other than software code, which will be made available under the MIT License (<http://opensource.org/licenses/MIT>).

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.

Per A1, P2PU will assert ownership over new content for the primary purpose of publishing under an open license. Content and code will be published on openly accessible websites - for content, on carnegielibrary.org and p2pu.org or a similar domain maintained by P2PU, and for code, in GitHub or a similar large, publicly accessible code repository. There will be no conditions or terms imposed on access and use beyond those contained in the relevant CC and MIT licenses, which are both recognized as prime exemplars of open licenses. Users will be notified to the terms of the licenses by direct links to the licenses' full text, in the format recommended by the respective license organizations. Moral rights will not

B. Workflow and Asset Maintenance/Preservation

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

CLP staff will review facilitator and staff training material annually while the content is being used. Updates to content based on developments in practice or changes in resources will be updated on www.carnegielibrary.org, and CLP will notify P2PU staff of changes to this content. All content will be co-designed with librarian partners, through a workflow including: Preliminary field interviews and consultation as to needs; input from librarians on content drafting and design, under the lead of P2PU Learning Lead, Development Lead, and Program Coordinator; field testing and iteration of draft content during three rounds of program delivery; final approval of materials by designated representative/s of each project partner; design oversight by independent design agency.

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).

Both content and code will be shared on GitHub as openly licensed components that can be utilized by anyone. During the grant period, we will host all content and software on cloud-based infrastructure such as Amazon Web Services or a similar infrastructure provider. After the grant period, we will ensure that content is hosted either through the same infrastructure or a third party content repository like Archive.org or free provider like GitHub pages. All code and instructions for use will be hosted on GitHub. We will only use open source technologies based on open standards that can be reused by anyone with the necessary skills and capable of paying nominal cloud infrastructure costs or provide their own infrastructure like Servers, domain names, etc.

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).

For online learning resources like the handbook, we will use vocabularies from Schema.org (<http://schema.org>) and compliment it with LRMI (<http://www.lrmi.net>) or VIAF (<http://viaf.org>), where appropriate.

We will also use the Open Graph Protocol (<http://ogp.me>) for marking up online resources to be shared via social media.

Code published on GitHub is automatically annotated with metadata including programming language used.

Libraries may take other measures to catalog and classify the project in local content systems.

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

Schema.org, LRMI, and Open Graph Protocol metadata will be embedded in the online resources and distributed together. As such it will be preserved as long as the content is preserved and metadata schemes are used. If content is updated at a later stage, metadata will be updated accordingly.

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.

Python - well-known programming language with a large community.
Django - respected web framework with a large community

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

All tools developed during this grant will be compatible with the existing learning circle toolkit.

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

Linux, Nginx & Postgres

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

Name of publicly accessible source code repository:

P2PU GitHub repository

URL:

<https://github.com/p2pu/>

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.

During prototype phase of project, (July 2019-February 2020) individual user feedback will be gathered during testing. Providing this feedback on the first draft of the tools will be an explicit element of the volunteer experience. The input will be used to improve usability of the tools. Throughout the project, outcome assessment surveys will be given to participants, volunteers, and staff who receive professional development. These surveys are optional and are administered anonymously through Public Library Association's Project Outcome web portal.

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?

No.

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).

Data gathered by libraries may include PII such as name, age, sex, and residential zip code. All data will be anonymized before public release or permanent storage.

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

We will review the data management plan at least twice a year. We will ensure that proper data is being collected from each site during each pilot phase on an ongoing (weekly) basis, as the data we are collecting will be essential for driving the project forward.