LAURA BUSH 21st CENTURY LIBRARIAN PROGRAM

Sample Application RE-259940-OLS-26
Project Category: Community-Centered Implementation

COBIMET

Amount awarded by IMLS:	$98,976
Amount of cost share:	$0

The Consortium of Metropolitan Libraries (COBIMET), a nonprofit organization dedicated to strengthening library services in Puerto Rico, will lead a professional development initiative that builds Artificial Intelligence (AI) competencies. In collaboration with Libraries Without Borders, the Puerto Rico Library Association (Sociedad de Biblotecarios), the Puerto Rico Conservation and Restoration Center (CENCOR), and the Puerto Rico Department of Education, the project will offer a structured training program aimed at approximately 250 librarians representing about 53 libraries across Puerto Rico. This community-centered implementation project will reach academic, school, public, and special libraries, through synchronous virtual workshops and online learning modules based on microlearning strategies. It responds to the growing need for training in AI technologies and their ethical, educational, and practical applications within library services.

Attached are the following components excerpted from the original application.

- Narrative
- Schedule of Completion

When preparing an application for the next deadline, be sure to follow the instructions in the most recent Notice of Funding Opportunity for the grant program to which you are applying.

AI Literacy for All Librarians

A. Introduction

The Consortium of Metropolitan Libraries (COBIMET)[1] —a nonprofit organization dedicated to strengthening library services in Puerto Rico through interinstitutional collaboration and the use of information technologies— requests $98,976.00 from the Institute of Museum and Library Services through the Laura Bush 21st Century Librarian Program to implement the project *AI Literacy for All Librarians*, a two-year professional development initiative designed to strengthen artificial intelligence (AI) competencies among librarians in Puerto Rico. The project responds to the growing need for training in AI technologies and their ethical, educational, and practical applications within library services, given the rapid expansion of these tools across educational, informational, and research environments. As a Community-Centered Implementation project, the initiative aligns with Agency-Level Goal 2 of IMLS, particularly Objective 2.1: Develop or enhance professional development and training programs to enable the library and archival workforce to meet the needs of their communities. In collaboration with organization partners: Libraries Without Borders, the Puerto Rico Library Association (Sociedad de Biblotecarios), the Puerto Rico Conservation and Restoration Center (CENCOR), and the Puerto Rico Department of Education, the project will offer a structured training program aimed at approximately 250 librarians representing about 53 libraries across Puerto Rico, including academic, school, public, and special libraries, through synchronous virtual workshops and online learning modules based on microlearning strategies. The AI Literacy will for All will align with the AI Universal Framework[2] (Lo, 2025) and the AI Competencies for Academic Library Workers[3] (ACRL, 2025)[4] The frameworks will guide the gradual development of skills from basic awareness to the strategic integration of AI into library services. As a result, the project will develop a scalable training model and reusable digital educational resources that will strengthen librarians' capacity to responsibly integrate artificial intelligence into library services, research support, information literacy instruction, and community learning initiatives, reinforcing the role of libraries as key spaces for access to knowledge, digital inclusion, and lifelong learning.

B. Project Justification

The AI Literacy for All Librarians project is justified within the framework of the Laura Bush 21st Century Librarian (LB21) Program by directly supporting its goal of enhancing training and professional

[1] For a COBIMET Organizational Profile see **Supportingdoc1.pdf**.

[2] See the full text in "AI Literacy for All: A Universal Framework," available in the supporting document **Supportingdoc2.pdf**.

[3] For the complete text, see "AI Competencies for Academic Library Workers" available in the supporting document **Supportingdoc3.pdf**.

[4] The complete list of references cited in this proposal is available in Supportingdoc4.pdf.

development for library and archives staff, enabling them to better serve their communities' information needs. According to the program description, funded projects must contribute to the development, training, and retention of library and archives professionals, thereby increasing these organizations' capacity to adapt to changes in the information environment. Similarly, the program aligns with the Institute of Museum and Library Services (IMLS) mission to support and strengthen libraries through grants, research, and policy initiatives that promote lifelong learning opportunities. Specifically, the project addresses Objective 1.2, which emphasizes supporting the training and professional growth of the museum and library workforce. Additionally, it aligns with Objective 2.1 of the LB21 program, which encourages the development or enhancement of training and professional development initiatives to enable library professionals to respond effectively to community needs through activities such as workshops, training sessions, certificates, and communities of practice.

This project also aligns with the priorities established in the Puerto Rico Five-Year LSTA Plan 2023–2027[5], particularly through initiatives aimed at strengthening the library workforce through professional development and continuing education programs to enhance library staff's competencies and improve the information services provided to users. Furthermore, the plan recognizes the fundamental role of libraries in fostering information literacy, critical thinking, and lifelong learning—abilities essential for students and communities to participate actively in the Knowledge Society. In this context, the AI Literacy for All Librarians project will directly contribute to these priorities by offering a structured training program in artificial intelligence for librarians from diverse library types in Puerto Rico.

This initiative also aligns with Executive Order No. 142773 (2025) issued by President Donald J. Trump, which recognizes that artificial intelligence is rapidly transforming the economy and social life by driving innovation, increasing productivity, and reshaping how people live and work. In this context, the executive order highlights the importance of promoting AI literacy and developing critical thinking skills, as well as strengthening the education system's pedagogical capacity through professional development programs that integrate the fundamentals of artificial intelligence across diverse learning contexts. In this regard, libraries—as community institutions dedicated to equitable access to information—play a strategic role in this process. Librarians act as mediators between technology, information, and the public, facilitating access to educational resources, promoting the development of information and digital skills, and supporting lifelong learning processes. Therefore, strengthening AI competencies among library staff not only contributes to the professional development of the field but also enhances libraries' capacity to promote digital inclusion, information and technological literacy, and equitable access to knowledge in their communities. In this way, the AI Literacy for All Librarians project will help prepare library

[5] See the full text in "Puerto Rico Five-Year LSTA Plan 2023–2027," available in the supporting document **Supportingdoc5.pdf**.

professionals to address emerging contemporary challenges and position libraries as key spaces for learning, innovation, and community engagement in the era of artificial intelligence.

Beyond being a passing technological trend, artificial intelligence (AI) is emerging as one of the most transformative innovations for the library field, due to its capacity to impact both internal library processes and their educational and social functions. These technologies are changing how information resources are managed, organized, and retrieved, as well as the services offered to user communities. AI can influence traditional technical processes—such as cataloging, data analysis, and information retrieval—as well as broader functions related to research support, mediation knowledge, and information literacy. (Cox, 2024). However, its adoption poses significant professional and ethical challenges, as librarians must understand and teach the critical use of these systems, while also addressing issues such as algorithmic bias, privacy, and equity in access to information. In this sense, organizations such as the Association of College and Research Libraries (ACRL, 2025) and UNESCO (2022, 2025, 2026) have underscored the need to strengthen professional competencies and to promote the ethical and responsible use of AI through continuous training and capacity-building.

Recent studies consistently identify significant gaps in AI competencies within the library field. International research has shown that while librarians recognize the potential of these technologies, they still face limitations in technical knowledge, practical experience, and understanding of their ethical and strategic implications (Ayinde et al., 2026; Lo, 2024; Oladokun & Umar, 2026). Other studies have identified staff training as one of the main challenges for the effective adoption of AI in libraries (Asim et al., 2023; Elsayed & Mohammed Abusharhah, 2025; Khan, 2025), as well as the need for more practical and specialized training programs. Additionally, recent research suggests that greater familiarity with these technologies can reduce anxiety and uncertainty associated with their use among information professionals (Adu, 2025). In the context of school libraries, international studies have also shown that although many librarians have intermediate levels of AI literacy, their confidence and preparedness to integrate these tools into educational processes remain limited (Zakir Hossain & Corinne Hertel, 2025).

In Puerto Rico, research on the relationship between artificial intelligence and libraries is still limited. Available studies have focused primarily on educators' knowledge and perceptions of these technologies, revealing early stages of AI literacy and difficulties in integrating them into educational practice (García Cardoza, 2025; Rodríguez Guiliani, 2025). Likewise, research on the digital divide among older adult populations highlights the need to strengthen accessible and continuous technology literacy programs (Pabón Gómez, 2025). In this context, librarians can play a key role as knowledge mediators and facilitators of digital competencies for students, educators, and communities.

The need to strengthen these competencies has also been identified by information professionals themselves in Puerto Rico. Training needs surveys conducted by COBIMET[6] in 2024, 2025, and 2026, as well as a survey by the Puerto Rico Library Association[7] (2026), show a significant interest in receiving training in AI and Technological Transformation, particularly in the use of artificial intelligence and advanced technologies to transform library services. The predominance of topics related to digital transformation—especially technology and AI/data—reflects a demand for professional upskilling driven by rapid changes in work tools and the growing integration of AI into education and research. Taken together, these findings highlight the importance of improving AI literacy among information professionals, with libraries serving as essential spaces for encouraging the critical, ethical, and responsible use of these technologies in society.

The project will provide a structured training program for approximately 250 librarians from about 53 libraries across Puerto Rico, including academic, school, public, and special libraries, through synchronous virtual workshops and online microlearning modules. With a total cost of $98,976 and an estimated 250 participants, the project costs roughly $396 per person, showing an affordable professional development model.

C. Project Work Plan

The project AI Literacy for All Librarians will be implemented over two years through four sequential phases: project planning, curriculum and content development, program implementation, and evaluation and dissemination. These phases are designed to ensure the systematic development of training resources, effective delivery of the program, and continuous assessment of its impact on the professional competencies of participating librarians.

Phase 1: Project Planning and Curriculum Design (September–November 2026)

During the first phase, the project team will finalize the planning and instructional framework that will guide the training program. The Project Manager will convene the project team and advisor organizations to review the project goals, timeline, roles, and communication procedures. During this phase, the team will design the instructional curriculum aligned with AI Literacy for All: A Universal Framework (Lo, 2025) and the AI Competencies for Academic Library Workers (ACRL, 2025). The AI Literacy for All framework provides a comprehensive model for developing artificial intelligence literacy by integrating five key domains: technical knowledge, ethical awareness, critical thinking, practical skills, and societal impact. These domains emphasize that AI literacy extends beyond technical understanding to encompass the ability to critically evaluate AI systems, understand their ethical implications, and assess their broader societal

[6] See **Supportingdoc6.pdf** for the analysis of training needs surveys conducted by COBIMET in 2024, 2025, and 2026.
[7] See **Supportingdoc7.pdf** for the results of the survey conducted by the Puerto Rico Library Association (2026).

impact. The framework organizes these competencies into progressive levels that guide learners from foundational awareness of AI concepts to more advanced levels of application and strategic understanding.

Complementing this approach, the ACRL AI Competencies for Academic Library Workers translate AI literacy principles into professional competencies tailored to the roles and responsibilities of library workers. This model highlights four key competency areas—knowledge and understanding, analysis and evaluation, ethical considerations, and applications that enable librarians to assess AI tools (e.g. Notebook LM, Magic School, Perplexity, Copilot, ChatGPT and Keenious) critically, address issues such as bias, privacy, and transparency, and responsibly integrate AI technologies into library services, research support, and instructional activities. By combining these frameworks, the project integrates a broad conceptual approach to AI literacy with competencies directly relevant to professional library practice.

The curriculum[8] will therefore be structured around four progressive competency levels—Awareness → Understanding → Application → Strategy—allowing participants to gradually develop both conceptual knowledge and practical skills for evaluating, applying, and strategically integrating AI technologies within library services and community learning initiatives. Subject Matter Experts (SMEs) and workshop instructors with expertise in artificial intelligence, digital literacy, and library services will collaborate with the Instructional Designer to develop the learning objectives, instructional modules, and assessment activities. The External Evaluator will also participate in this phase to design the evaluation framework and identify baseline measures of participant knowledge and skills. Stakeholder input will be incorporated through consultations with representatives from advisor organizations, including Libraries Without Borders, the Puerto Rico Library Association (Sociedad de Bibliotecarios), and CENCOR, as well as through feedback gathered from prior training needs assessments conducted by COBIMET. This input will help ensure that the curriculum responds to the professional needs of librarians and the communities they serve.

Phase 2: Development of Training Materials (December 2026-April 2027)

In the second phase, the project team will develop instructional materials and the digital learning environment to support the training program. The Instructional Designer and SMEs will create microlearning modules hosted on platforms such as ThinkFic, Articulate Rise, and the COBIMET Training Center. These modules will include short instructional videos, infographics, interactive exercises, case studies, quizzes, and practical demonstrations related to the use of AI in library services. The IT Manager will support the integration of these materials into COBIMET's learning management system and ensure accessibility and usability across devices. To promote open access and broader dissemination, the instructional materials developed through the project will be released under a Creative Commons license,

[8] Adapted from Lo (2025), AI Literacy for All: A Universal Framework, and the AI Competencies for Academic Library Workers (ACRL, 2025). See Supporting Document 8 (Supportingdoc8.pdf) for the full diagram.

allowing other libraries and educational institutions to adapt and reuse the resources. In addition, all digital learning materials will be designed in accordance with the Web Content Accessibility Guidelines (WCAG) to ensure accessibility for users with diverse abilities. During this phase, the project team will also design digital badges and micro-credentials that participants will receive upon completing each training level. All instructional materials will undergo peer review by project partners to ensure quality, relevance, and alignment with professional standards.

Phase 3: Program Implementation and Training Delivery (May 2027–July 2028)

The training program will be delivered through synchronous virtual workshops combined with asynchronous online learning modules. During Year 1, participants will complete two training levels:

- Level 1: Awareness, which will introduce foundational concepts of artificial intelligence, its applications in libraries, and key ethical considerations.
- Level 2: Understanding, which will explore how AI systems function, how to evaluate AI tools critically, and how to integrate AI responsibly in research and educational contexts.

During Year 2, participants will complete the other two training labels:

- Level 3: Application will focus on the practical integration of AI tools into library services, including research support, information literacy instruction, and community engagement initiatives. Participants will apply AI tools to real-world library scenarios and develop practical approaches for integrating these technologies into their professional practice.
- Level 4: Strategy will emphasize leadership and strategic planning for adoption of AI within libraries, including the development of institutional policies, ethical governance frameworks, and sustainable initiatives that promote digital inclusion and responsible use of artificial intelligence in library services and community learning environments.

Each level will consist of a two-week synchronous virtual workshop series complemented by microlearning activities and applied exercises. SMEs and workshop instructors will facilitate the sessions, while the Project Director will oversee logistics, coordination, and participant engagement. Stakeholder engagement will continue during this phase through participant feedback sessions, surveys, and consultations with partner organizations to ensure the program remains responsive to evolving needs.

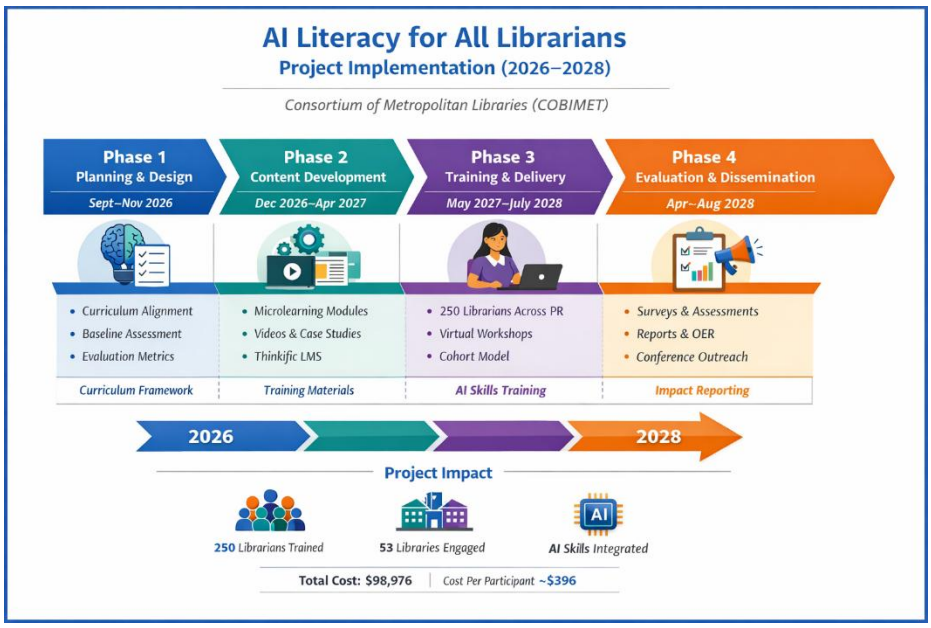
Participants will be chosen through an open application process to ensure diverse representation across geographic regions, institutional backgrounds, and professional roles within the library field. COBIMET will promote the program through various outreach methods, including its network of 17 member institutions, professional mailing lists, social media platforms, and collaborations with organizations such as Libraries Without Borders, the Puerto Rico Library Association, and the Puerto Rico Conservation and Restoration Center (CENCOR). These partnerships will help guarantee that the opportunity reaches librarians in different educational and community settings. Applicants will need to complete a brief online

form that asks for details about their professional background, institutional affiliation, and interest in incorporating artificial intelligence into library services. Selection will focus on applicants who demonstrate a commitment to applying AI literacy within their institutions and to sharing knowledge with colleagues and communities. The structured training will serve about 250 librarians from roughly 53 libraries across Puerto Rico. Participants will be organized into cohorts of approximately 20–25 librarians, fostering interactive learning, peer collaboration, and active engagement during synchronous workshops. This cohort-based model will also support the growth of professional networks and communities of practice centered on the responsible use of artificial intelligence in libraries. To promote equity and access, the program will prioritize involvement from librarians working in underserved communities, rural areas, and institutions with limited access to advanced technology training opportunities.

Phase 4: Evaluation and Dissemination (April 2027–August 2028)

Evaluation will occur throughout the project using both formative and summative approaches. The External Evaluator will collect and analyze data on participant learning outcomes, program effectiveness, and overall project performance. Evaluation methods will include pre- and post-training assessments, participant surveys, workshop feedback forms, and analysis of participant engagement and completion rates. These data will be used to assess progress against the program's performance measures: effectiveness, efficiency, quality, and timeliness. The evaluation results will inform improvements to the training program and help demonstrate the project's impact on participants' AI literacy and professional practice. The final phase will also include dissemination activities to share project results and resources with the broader library community. Training materials, lessons learned, and evaluation findings will be shared through presentations, webinars, and professional networks to support the adoption of similar AI literacy initiatives in other libraries.

The following infographic summarizes the key milestones of the project work plan:



Project Staff, Partners, and Consultants

The project will be led by the Consortium of Metropolitan Libraries (COBIMET). The Project Director will oversee overall project management, coordinate activities, communicate with project partners, and supervise project partners and training activities. Project partners include Libraries Without Borders, the Puerto Rico Library Association, and the Puerto Rico Conservation and Restoration Center (CENCOR). These partners will contribute expertise in outreach, professional engagement, and artificial intelligence. External consultants will provide specialized expertise in areas including:

1. artificial intelligence, digital literacy, and AI library services-Subject Matter Experts (SMEs) and workshop instructors.
2. instructional design-Instructional Designer.
3. accessibility compliance and IT support-IT Manager
4. program evaluation- External Evaluator

D. Project Results

The AI Literacy for All Librarians project will produce tangible results to strengthen librarians' artificial intelligence literacy and professional competencies, while providing resources that other libraries and educational institutions can adopt. The primary intended result is the development and implementation of a structured professional development program that equips librarians with the knowledge, skills, and ethical frameworks needed to understand, evaluate, and apply artificial intelligence technologies within library services and community learning environments.

The project will generate several key deliverables. These include a comprehensive AI literacy training curriculum structured around four competency levels (Awareness, Understanding, Application, and Strategy), a series of synchronous virtual workshops, and a collection of online microlearning modules

developed through platforms such as Thinkfic LMS, Articulate Rise, or the COBIMET Training Center. Additional deliverables will include instructional resources such as short instructional videos, infographics, case studies, interactive learning modules, and practical guides for integrating AI tools into library services. Participants who complete the program will receive digital badges or micro-credentials recognizing their achievement and AI literacy competencies. Together, these deliverables will directly address the identified need for professional development in artificial intelligence among librarians and will help bridge the gap between the rapid adoption of AI technologies and the limited training available to library professionals.

The project results are designed to be adaptable, generalizable, and useful to other institutions and communities. The curriculum, instructional materials, and training framework will be developed using widely recognized competency models, including AI Literacy for All: A Universal Framework and the AI Competencies for Academic Library Workers, ensuring that the program reflects current professional standards. All digital learning resources will be designed in modular formats that allow other libraries, library consortia, and educational organizations to adapt the materials to their own contexts and training needs. The resources will be developed in accordance with best practices in digital learning design, accessibility, and open sharing to facilitate reuse and adaptation.

Dissemination of project results will occur through multiple channels to ensure broad outreach to the intended beneficiaries, including librarians, educators, and library organizations. Project outcomes, training materials, and lessons learned will be shared through conference presentations, webinars, professional workshops, and publications in library and information science venues. The project team will also collaborate with partner organizations and professional networks to promote resources and encourage adoption by libraries beyond the participating institutions.

The project team will also ensure that the project's benefits continue beyond the grant period. The training materials and microlearning modules will remain accessible through the COBIMET Training Center or other digital learning platforms, allowing future cohorts of librarians to participate in the program. In addition, the curriculum framework and instructional resources will serve as a sustainable model for integration into future professional development initiatives offered by COBIMET and partner organizations. By establishing a reusable training framework and openly sharing educational materials, the project will contribute to the long-term development of AI literacy within the library profession. It will support libraries in their evolving role as facilitators of digital inclusion and community learning in the age of artificial intelligence.

Schedule of Completion

Year 1 (2026-2027)												
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Activity	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Project Planning & Curriculum Design	■	■	■									
Develop Training Materials				■	■	■	■	■				
Level 1 Workshops (Awareness)									■	■	■	■

Year 2 (2027-2028)												
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Activity	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24
Level 2 Workshops (Understanding)	■	■	■	■								
Level 3 Workshops (Application)					■	■	■	■				
Level 4 Workshops (Strategy)									■	■		
Evaluation & Dissemination											■	■