# **Diverse Librarianship Career Training and Education Program**

**SUMMARY:** Southern Illinois University Edwardsville (SIUE) will develop a career training program that introduces ten high school seniors from East St. Louis Senior High School to careers in librarianship. Over the course of this two-year program, a team of five academic librarians along with staff at partner institutions at the East St. Louis Learning Resource Center, Edwardsville Public Library, St. Louis Public Library, Missouri Historical Society, and The State Historical Society of Missouri will mentor, educate, and train students from diverse and underrepresented minority groups (primarily low-income and African American). This project will recruit students from East St. Louis School District 189 Career Technical Education (CTE) program, which is part of a national initiative to provide skills-based, hands-on training to high school students. This project seeks to address and reduce the most pervasive issues related to recruiting and retaining diverse library employees by providing a pathway to the profession prior to entering an LIS graduate program and by developing a more equitable approach to recruitment and retention. This project will result in a toolkit that will be disseminated for libraries and cultural institutions to support the recruitment, training, and retention of diverse librarians. The total funds requested from IMLS for this project is \$249,998.18.

**STATEMENT OF BROAD NEED:** While there has been an increasing number of programs aimed at recruiting and retaining diverse librarians, the library profession has remained practically unchanged in terms of increasing the number of diverse library staff. The literature review revealed several barriers in recruiting and retaining librarians from diverse and underrepresented backgrounds. Among the most frequently cited are the educational achievement gaps and systemic challenges such as poverty and racism. Additionally, many low-income students of color may be deterred from seeking positions in the library field because of few paid internships or lack of familiarity with the library profession. Within the profession, there is less access to mentors and hands-on library work experience opportunities for underrepresented students as well as the lack of a substantial curriculum designed to support critical librarianship and cultural competencies. This proposal is a call to action in response to the serious lack of diverse representation in library and information science professions identified in the IMLS forum report, *Positioning Library and Information Science Graduate Programs for 21st Century Practice*.

### Challenges and Opportunities

# In Positioning Library and Information Science Graduate Programs for 21st Century

*Practice*, Vailey Oehlke indicates librarian recruitment needs to do two things: go where diverse populations already are and expose students to the value of LIS careers as early as high school and to do so with an "equity lens." The SIUE East St. Louis Center in East St. Louis, Illinois has supported the Metro East community for more than 70 years. To further invest in this community and the region, this program will build stronger partnerships between SIUE, the East St. Louis Senior High School, and libraries and cultural centers in the region. We will do this by recruiting diverse seniors from East St. Louis Senior High School's existing Career and Technical Education (CTE) program. These students will participate in yearlong, paid internships, splitting their time by attending school in the morning and working in a library or cultural center in the afternoon.

Literature about CTE shows a high percentage of Black high school students participate in their school's CTE programs; over a million Black or African American students took part in CTE nationwide in 2014-2015 (U.S. DOE, 2018). James R. Stone III, director of the National Research Center for Career and Technical Education says, "career readiness is a complement to college readiness (2017)." However, traditionally, libraries have not been partners of CTE programs, and our program will change that. This is an opportunity to recruit diverse librarians in high schools by supplying a model for CTE programs and libraries to partner and create career pathways for diverse students.

### Building Upon Existing Practice

The Diverse Librarianship Career Training and Education Program will adopt and adapt existing models of workforce pipelines, diversity outreach initiatives, and professional internship programs to create and disseminate a professional recruitment toolkit.

Our program will utilize some of the existing strategies and theories within the workforce pipeline model for students to create and maintain interest in the library profession. Diversity pipeline programs have traditionally promoted the academic and professional achievement of minorities in particular fields. The STEM field, for instance, is one area in which the impact of pipeline programs on practice is being investigated. Francisco Alonso uses a STEM pipeline metaphor to describe the inflow of students into the STEM educational system from early on, all the way through primary, secondary, and post-secondary school levels (Alonso, 2020). However, as Alonso points out, a pipeline "leak" will result if students lose interest in their career path in college. Alonso says it is important to feed the "STEM pipeline" from the start (primary grades) and continue to monitor it along the way (high school) to avoid leaks (Alonso, 2020). The lifelong mentorship goal that our program model provides will help stop the "leak" of students on a library services career path. The healthcare industry also uses the workforce pipeline approach to keep students in a career path. The "Mentoring in Medicine" program founded in 2006 uses interventions such as individual mentoring, conference attendance, hands-on experience, and special instruction in health careers (Holden, 2014). Additionally, smaller professional work experiences such as ALA's Student-to-Staff Program will help us build an internship and curriculum model to support our program goals.

In 2009, the University of Illinois at Urbana-Champaign initiated a library outreach program that presented hour-long informational sessions to underrepresented students. These sessions "were planned to market less-known aspects of the profession to appeal to students such as salaries, employability, graduate school funding, and the diversity of professional roles within the profession" (Love, 2010). Although their survey results indicated that stereotypes and misconceptions about librarianship do exist among students, "the results put forth the potential long-term benefits of personal connections, strategic marketing, and targeted recruitment" (Love, 2010). Our program could utilize existing library outreach strategies and apply them to support a larger curriculum over a longer period. This will result in more exposure to the field and more expansive knowledge of information professions.

According to *Bridging the Skills Gap: Career and Technical Education in High School*, almost all public-school districts (98%) offered CTE programs to high school students during the 2016–17 school year. By using CTE programs as a pipeline, this project has the potential to lead to systemic changes within librarianship. Libraries and cultural institutions can use their influence by focusing on introducing underserved high school students to professional careers in LIS. Although no longer a job-specific training program of the past, some CTE programs have not evolved to include work-based learning that inspires professional careers. East St. Louis CTE students are still focusing on technical careers mainly in retail and fast food. With the help of the East St. Louis CTE professional careers in libraries and cultural institutions. Research indicates that exposure to a career field early on can help a student make up their mind and take a more focused approach to their career. As with most careers, it is difficult to secure employment in a field when one is lacking experience. Ultimately, this program's scaffolding of library science curriculum within high school students' education can motivate and support CTE students who desire to turn their technical education into a professional career. The creation of diversity workforce pipelines can benefit employers, students, and communities at large.

This project will build greater knowledge, skills, and abilities in the library and archives professions through its accessibility and adaptability. The IMLS report *Positioning Library and Information Science Graduate Programs for 21st Century Practice* inspired us to answer a call to help diversify librarianship. Additional inspiration was drawn from programs like the *Public Library Association's (PLA) Inclusive Internship* 

Initiative, John C. Smith's Diversity Archivists Partnership, and Brooklyn Public Library's Librarians of Tomorrow. We hope to bring certain aspects from all three programs into ours. For instance, we plan on adopting aspects of the *PLA's Inclusive Intern Initiative* by providing students with paid internships, professional mentorship, and access to community partners. Like the *Diversity Archivists Partnership*, our program will focus on African American students. Furthermore, like the *Librarians of Tomorrow*, our program will focus on students from low-income neighborhoods. By incorporating all these aspects into our program, in addition to helping build the library and archives profession, we aspire to support the continuing education of underrepresented students.

**PROJECT DESIGN:** The overall aim with this project is to reduce the most pervasive issues in recruiting and retaining diverse library employees by providing a pathway to the profession prior to entering an LIS graduate program and by developing an equitable approach to recruitment and retention. This project will result in a toolkit that will be disseminated for libraries and cultural institutions to support the recruitment, training, and retention of diverse librarians. The overarching goal is to make a positive, lasting impression on students by providing them with individualized culturally responsive mentorship and real-life experiences in a library/cultural organization setting that will encourage them to explore and pursue potential careers as library professionals. This project will span two years from 2021 – 2023. In August of each year, we will recruit a cohort of five high school seniors, matching each student to one of the five SIUE academic librarians as a mentor.

The project goals are as follows:

1. Recruit two cohorts of five high school seniors from diverse and underrepresented backgrounds to work in paid positions in library/cultural organization settings as part of a cooperative education program (Appendix A).

2. Partner with library/cultural organizations that are embedded in diverse communities to create sustainable relationships (Appendix B).

3. Make a positive, lasting impression on cohort students by providing individualized culturally responsive mentorship and real-life experiences in library/cultural organization settings and encourage them to explore librarianship as a possible career.

4. Expose students to networking, professional development, peer learning, and community building opportunities by participating in a culminating event and awards ceremony and attending the annual ALA conference.

5. Develop and disseminate a toolkit that includes a curriculum of librarianship for students and library staff that emphasizes leadership training, racial equity, racial justice, inclusion, and culturally responsive education (Appendix C).

Project Timeline										
Year 1: July 2021 – June 2022			Year 2: July 202	22 – June 2023						
July 2021 – August 2021	Development and Dissemination of Partner Training		July 2022 – August 2022	Dissemination of Partner Training						
July 2021 – October 2021	Curriculum Development									
August 2021 – September 2021	CTE Library Orientation for Cohort 1 Cohort 1 Interview Process		August 2022 – September 2022	CTE Library Orientation for Cohort 2 Cohort 2 Interview Process						
August 2021, October 2021, March 2022, June 2022	Year -1 Program Evaluation		August 2022, October 2022, March 2023, June 2023	Year -2 Program Evaluation						
September 2021 – May 2022	Cohort 1 Working On- site at Partner Organizations		September 2022 – May 2023	Cohort 2 Working On-site at Partner Organizations						
October 2021 – May 2022	SIUE Mentors: Cohort 1 Training (monthly)		October 2022 – May 2023	SIUE Mentors: Cohort 2 Training (monthly)						
May 2022 – June 2022	Cohort 1 Culminating Experience and ALA		May 2023 – June 2023	Cohort 2 Culminating Experience and ALA						

Students will be placed in a partner organization to work part-time during their senior year. Activities will include working for the partner organization for up to 24 hours a week (\$15/hour) for 30 weeks; job-shadowing opportunities at each partner organization; trip to the 2022 & 2023 ALA Annual Conferences; and a culminating event at SIUE Lovejoy Library or East Saint Louis Senior High School each summer where cohort students will present on their experiences in the program and apply these experiences in developing future programming and services. In order to accommodate the work schedule, students in the CTE program will be released from school each day no later than 12:30 PM and use the public transportation pass provided and budgeted for them to commute to and report for work. Many of the partner organizations have evening and weekend hours available for the students to work their 24 hours/week. Out of this 24 hours/week, time will be set aside each month to deliver our library curriculum.

# Strategic Collaborations and Partnerships

This strategic collaboration aims to build long-lasting partnerships between SIUE's Lovejoy Library and the East St. Louis community with organizations like SIUE East St. Louis Learning Resource Center, Edwardsville Public Library, St. Louis Public Library, Missouri Historical Society, and The State Historical Society of Missouri. We will provide cultural competency training to our partners to equip them with the tools to work with students from diverse backgrounds. This training will be presented as an online learning module, primarily focusing on anti-racism and intersectional relationships.

### 2022 – 2023 ALA Conferences

The culminating trips to the 2022 & 2023 ALA Annual Conferences will allow students to build on the experience gained from participating in the program and be introduced to a wide range of perspectives and voices in librarianship, networking, and professional development opportunities.

### Culminating Event and Awards Ceremony

Each summer there will be a culminating event at SIUE Lovejoy Library or East Saint Louis Senior High School where cohort students will present on their experiences in the program and apply what they have learned to develop future programming and services, allowing for validation of their experiences and worthwhile endeavors in the field. This event will also serve as an awards ceremony to honor the students for their participation and completion of the program.

# Project Staff

Tammie Busch, MA, MLS, is the Cataloging Unit Supervisor, Catalog and Metadata Librarian, and an Assistant Professor at Southern Illinois University Edwardsville (SIUE). Tammie has over twenty years of experience working in public, school, special, and academic libraries. She spent over ten years working with students from diverse backgrounds in grades K-12 as part of the Jefferson City School District Library Program. She is an alumnus of Collinsville High School's CTE Cooperative Work Experience Program. Tammie is serving as the project director and a mentor for the Diverse Librarianship Career Training and Education Program. Using her experience from the University of Missouri's Public Library Leadership Fellows Program, Tammie will guide project goals and initiatives to develop a sustainable toolkit for promoting librarianship to underrepresented students.

Lora Del Rio, MSLIS, is Area Coordinator for Research & Teaching, Humanities Librarian, and Associate Professor at Southern Illinois University Edwardsville. She has over 12 years of post-graduate professional library experience and has worked in 7 different libraries as either a paraprofessional, preprofessional, or professional librarian. She is the author of several peer-reviewed publications and funded grant projects and has presented nationally and internationally. She has chaired the SIUE Library Marketing Committee since 2018; she manages the library social media accounts, writes campus and external library communications, and serves on the SIUE social media committee and as library liaison to the campus marketing department. She has served on 14 library search committees, four times as chair. She will use her expertise to assist with cohort recruiting, communications and marketing of the project, serve as a mentor to cohort students and develop and disseminate a toolkit.

Elizabeth Kamper, MLIS, is the Information Literacy Librarian and an Assistant Professor at Southern Illinois University Edwardsville (SIUE). She has been teaching information literacy instruction in libraries for the past eight years at three different institutions. Elizabeth specializes in teaching first-year student research skills to ENG 101 and 102 students. She also creates online learning objects to support distance learning and adult education. Through her research, Elizabeth investigates how self-expression and queer identities support classroom pedagogy under traditional ideas of research, writing, and teaching. Elizabeth will use her expertise in adult education and librarianship to mentor students and build curriculum components for this project. Additionally, Elizabeth will use her experience as an ALA Student-to-Staff participant to support the project's culminating experiences and conference attendance.

Shelly McDavid, MLS, M.Ed., is the Area Coordinator for Access & Library Spaces, STEM Librarian, and Assistant Professor at Southern Illinois University Edwardsville. She has over 10 years of post-graduate professional library experience and has worked in 9 different libraries as either a paraprofessional, pre-professional, or professional librarian. She is the co-author of 2 peer-reviewed book chapters and has presented nationally. She holds a Master of Education in Counseling, with dual tracks as a Licensed Practicing Counselor

(LPC) and Secondary School Counselor, this was accomplished while working a 20 hour/week practicum (2007-2008) counseling At-Risk Sophomores in the Hickman High School At-Rick program in Columbia, MO. Currently her research areas include evidence-based and data-driven decision making for assessment of library collections, data, instruction, operations, resource sharing, services, and spaces in libraries, as well as scholarly communications and STEM education. She specializes in ensuring equitable access (online and physically) to library resources and for all users. For this project, Shelly will be responsible for communication with the project evaluator, coordinating data collection and analysis, as well as serve as a mentor to cohort students and develop and disseminate a toolkit.

Simone Williams, MLIS, MA, is the Diversity and Engagement Librarian and Assistant Professor at Southern Illinois University Edwardsville (SIUE). Before her position at SIUE, she spent several years working at cultural institutions in the St. Louis metropolitan region in numerous positions. Additionally, she has an extensive history of working with students from historically underrepresented backgrounds, especially those from low-income, black, LGBTQIA+, and immigrant communities. Her research interests are Cultural Informatics and Heritage, Digital Humanities, Digital Libraries, Diversity and Social Justice, Information Access, Information Literacy, Social Media, Artificial Intelligence and Machine Learning, Community Informatics. She is also a native East Saint Louisan. For this project, in addition to serving as a mentor, Simone will be responsible for communicating with community partners, creating and disseminating curriculum, and providing oversight of diversity, equity, and inclusion goals.

Denice Adkins, Ph.D., MLS, is a professor at the School of Information Science & Learning Technologies, University of Missouri, and co-editor of Journal of Education for Library & Information Science. She is currently serving as Membership Director of the Association for Library and Information Science Education and Treasurer for REFORMA (The National Association to Promote Library & Information Services to Latinos and the Spanish-Speaking). Her past experiences include a Fulbright Scholarship to Honduras, a Fulbright Specialist to India, serving as president of REFORMA, secretary-treasurer of ALISE, and councilor-at-large for the American Library Association. Her research interests include public libraries, services to the Latinx community, and services for diverse library users. Denice will serve as the evaluator for this project.

# **Project Mentors**

Cohort students will be matched with project staff who best complement their professional goals and interests. The mentor will socialize and acculturate each student into the LIS profession. Additionally, students will learn to navigate spaces where they are underrepresented, share their experiences, learn of workplace expectations, and learn to advocate for themselves. Each mentor will guide the students to pursue undergraduate and graduate degrees related to or closely aligned with library and information science. Mentors will establish relationships with students over the course of the project and potentially throughout their post-secondary education and track and document students' progress. Students will also receive individualized and customized support, guidance, and feedback from each project mentor.

Our mentors have demonstrated expertise with the necessary skills, experience, and knowledge to recognize significant challenges and impact broad change to the student cohorts and the field. Collectively mentors have over 25 years of post MLS/MLIS experience in libraries and other cultural institutions.

### Assessment

The team will ensure project success and impact by collaborating closely with partners as well as building relationships with cohort students, eliciting feedback often and in many formats. We will measure the success and assess goals throughout the project timeline across all areas – broad impact,

current significance, strategic collaborations, demonstrated expertise, and diversity, equity, and inclusion.

With the aid of an external evaluator, focus groups, and self-assessment throughout the project, we anticipate receiving ample external input (Appendix D). Another avenue for us to receive more input is to submit this to a peer-reviewed library conference workshop to get peer input from the LIS field.

# Toolkit and Dissemination

We will develop and disseminate a toolkit under a Creative Commons license for reuse, making it available to library/cultural organizations to replicate the program in their communities. The toolkit will include: Example partnerships agreements, a student job description, curriculum, mentorship best practices, and other supporting documentation.

We envision this project will serve as a sustainable model for library cooperative education so other institutions can incorporate high impact practices that include diversity initiatives. We believe that libraries should make a local effort to incorporate librarianship opportunities into existing high school partnerships and educational programs, which will have a national impact on library recruitment and bring awareness to the profession. The results of this program will be widely disseminated and discussed in subsequent conferences, publications, and workshops.

To build consensus and enable information professionals to easily adapt the toolkit and curriculum to meet the needs of their diverse communities and populations, we will publish our findings in academic journals, our own open-access institutional repository SPARK, present at national conferences and governing organizations subsections, like ACRL Instruction, use our professionally affiliated list-servs, and even host a webinar. We will also market this program to CTE programs and existing high school partnerships and educational programs around the country.

# COVID-19 Contingency

Due to the pandemic caused by COVID-19, some of the libraries and cultural institutions serving as workplace partners are not operating under normal conditions. If by August 2021, workplace partners are unable to host students in a manner that provides a meaningful career exploration experience, the Diverse Librarianship Career Training and Education Program will begin work on some planning activities such as our partner cultural competency training and curriculum but request an extension from ILMS to begin the student workplace experience later.

**DIVERSITY PLAN:** Southern Illinois University Edwardsville has undertaken ambitious diversity initiatives to recruit and retain diverse students, faculty, and staff. As the university continues this work, it is instrumental that it centers the library in these efforts since academic libraries traditionally have had low recruitment and retention levels of people from diverse and underrepresented backgrounds. Recent scholarship demonstrates that a hostile racial climate and a lack of inclusive environments in libraries contribute to a lack of retention of these professionals and have even deterred those from underrepresented backgrounds from pursuing careers as library professionals (Alabi, 2018).

Answering the call of IMLS to start preparing underrepresented students for employment as library professionals as early as middle school, this proposal aims to recruit low-income African American high school students from East Saint Louis, IL to pursue careers as library professionals as well as address some of the systemic problems with recruiting and retaining diverse library professionals. By implementing a two-pronged approach that is beneficial to both students and employers, this project will help students who would not have considered working in a library be placed in positions where they may have been overlooked or thought to be unqualified due to perceptions about their race and socioeconomic background. Additionally, students will be provided with support through a connected network of librarians and professional mentors and encouraged to

obtain additional education to advance their careers. It also helps libraries already embedded in communities that serve diverse populations to recognize and promote talented library staff from these communities.

This project also intends to help the Career and Technical Education (CTE) program in East Saint Louis and similar CTE programs that primarily serve underrepresented students evolve beyond providing job readiness training. Underrepresented high school students in low-performing or poor school districts should be exposed to career pathways in librarianship earlier so that this translates into higher educational attainment and greater representation of these students in the field. This project is intended to help youth from East Saint Louis and similar communities overcome many of the hurdles to entering professional library careers. CTE programs are an untapped resource for recruiting highly motivated students from diverse backgrounds as library professionals. More importantly, these students will be provided with layers of support including mentorship from their workplace supervisors (Appendix E) and access to broader campus resources (Counseling Services, Cougar Career Closet, Cougar Cupboard food pantry, the Speech Center, and the Writing Center), provided transportation, and paid for fieldwork experience that is highly valued in LIS programs. Therefore, it is important to create or strengthen pipeline programs such as CTE. It is critical that these students be prepared as possible for college level coursework from combined educational and hands-on experience and access to mentors before entering the profession so that they do not fall behind students who have greater economic, educational, political, and social capital.

**BROAD IMPACT:** This project will create a toolkit that includes example partnerships agreements, a student job description, curriculum, mentorship best practices, program evaluations, assessment data, and other supporting documentation. This open access toolkit will be published online with a Creative Commons license allowing more high school CTE programs and libraries/cultural organizations to pursue partnerships with readily available documentation they can adapt to best fit their needs. Open access publication outlets we will pursue include SPARK (SIUE's institutional repository) and an open access, peer-reviewed journal published in the Directory of Open Access Journals.

We will disseminate our toolkit to our primary communities of high school CTE students and administrators, community partners, and LIS professionals multiple ways. First and foremost, we will leverage our professional associations including ALA and ACRL through conference presentations, publications, and listservs. The success of this program depends upon strong partnerships; therefore, we will pursue these publications in collaboration with our primary communities. Additionally, we will leverage our consortia membership. The Consortium of Academic and Research Libraries of Illinois (CARLI) serves 90% of Illinois higher education students, faculty, and staff at 128 member institutions. Communication through CARLI, including their listserv, in conjunction with our professional associations, can provide far reaching impact for disseminating our project findings.

Regionally, our library network will allow us to identify and provide guidance to other libraries interested in developing their own partnership with a CTE program within a diverse and underserved community. Conversations with our partner libraries have ensured us that the students' continued employment is a possibility and that they encourage their staff to continue their educational development and consider LIS as a career. Both the St. Louis Public Library and The State Historical Society of Missouri have a history of offering employment to students and interns who have worked as volunteers or have been funded externally. There is also the potential for us to work with the city of East St. Louis to secure funding to keep our students employed upon conclusion of the program. Funding from IMLS will allow us to pursue this unique project to diversify librarianship nationwide. However, to have the greatest influence, upon completion of this grant funded project, this work cannot stop.

The creation of this project came out of a desire to answer a call from *Positioning Library and Information Science Graduate Programs for 21st Century Practice* to do our part to diversify librarianship by reaching out

to high school students in diverse communities. Providing high school students with an opportunity to begin the early exploration of LIS careers, and to do so in a manner that supports underserved and underrepresented students who might not normally have this opportunity, is a recipe for success. This project will drive change within CTE programs resulting in another path to systemic change within librarianship. Establishing partnerships with CTE programs is the first step for libraries and cultural organizations to recruit for diversity; the second and very important step is to develop work environments to retain librarians and information professionals from underrepresented backgrounds. This can be done through cultural competency training and establishing early mentoring relationships. Through this project, we are providing a map for success to recruit and retain for diversity in librarianship, thus reshaping the field. By providing libraries and librarians with a toolkit to start their own project, we believe they will take notice of this program and follow our lead. Utilizing a strength in numbers approach can lead to widespread impact by identifying libraries with similar goals.

Bibliography (Appendix F)

### Schedule of completion Year 1: July 2021 – June 2022

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
CTE Library Orientation Cohort 1												
Cohort 1 Interview Process												
Cohort 1 Working On-Site												
Development and Dissemination of Partner Training												
Curriculum Development												
SIUE Mentors: Cohort 1 Training (using curriculum)												
Cohort 1 Culminating Experience and ALA												
Year -1 Program Evaluation												

*CTE Library Orientation Cohort 1:* The student cohort will engage with the mentors, through an orientation session providing them with program details and expectations.

*Cohort 1 - Interview Process:* The student cohort will be expected to set-up interviews with the partner libraries and cultural institutions.

Development and Dissemination of Partner Training: To support cultural competency partnership training.

*Curriculum Development:* For students that emphasizes leadership training, antiracism, and inclusion.

*SIUE Mentors: Cohort 1 Training (using curriculum)*: The mentors will be delivering monthly workshops from the developed curriculum to emphasize leadership training, racial equity, racial justice, inclusion, and culturally responsive education.

*Cohort 1 Culminating Experience and ALA:* Each summer there will be a culminating event at SIUE Lovejoy Library where cohort students will receive awards and present on their experiences in the program and apply what they have learned.

*Year -1 Program Evaluation:* The program evaluator will review data derived from surveys and focus groups of students, mentors, and partner organizations to draw conclusions and make recommendations for improvements in the second year of the program.

*Communication:* The program evaluation, assessment data, and toolkit will be published online open access with a Creative Common license allowing other high school CTE programs and libraries to pursue partnerships with readily available documentation they can adapt to best fit their needs.

### Schedule of completion Year 2: July 2022 – June 2023

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
CTE Library Orientation Cohort 2												
Cohort 2 Interview Process												
Cohort 2 Working On-Site												
Dissemination of Partner												
Training												
SIUE Mentors: Cohort												
2 Training (using curriculum)												
Cohort 2 Culminating Experience and ALA												
Toolkit Assembly												
Year -2 Program Evaluation												

*CTE Library Orientation Cohort 2:* The student cohort will engage with the mentors, through an orientation session providing them with program details and expectations.

*Cohort 2 - Interview Process:* The student cohort will be expected to set-up interviews with the partner libraries and cultural institutions.

Dissemination of Partner Training: To support cultural competency partnership training.

*SIUE Mentors: Cohort 2 Training (using curriculum)*: The mentors will be delivering monthly workshops from the developed curriculum to emphasize leadership training, racial equity, racial justice, inclusion, and culturally responsive education.

*Cohort 2 Culminating Experience and ALA:* Each summer there will be a culminating event at SIUE Lovejoy Library where cohort students will receive awards and present on their experiences in the program and apply what they have learned.

*Year -2 Program Evaluation:* The program evaluator will review data derived from surveys and focus groups of students, mentors, and partner organizations to draw conclusions and make recommendations for improvements to future iterations of the program.

*Communication:* The program evaluation, assessment data, and toolkit will be published online open access with a Creative Common license allowing other high school CTE programs and libraries to pursue partnerships with readily available documentation they can adapt to best fit their needs.



# **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.

We intend to make all program material freely available and attribute all work to our project staff. Attribution will be given to IMLS for their support. We support open access and intend to share deliverables created during the project in our institutional repository. We will release our deliverables under a Creative Commons license.

**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.

PI, co-PIs, and SIUE do not assert copyright and intend to make digital content open access. As a freely available resource, we do not anticipate any barriers to access of this created content.

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

The project will not create any products that will involve privacy concerns or require obtaining permissions or rights or raise any cultural sensitivities.

### 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.

This program will result in the creation of freely-available deliverables including a student orientation plan, partner training plan, monthly student curriculum, toolkit, and culminating experience event plan for a training program that will introduce high school from diverse and underrepresented minority groups in Career and Technical Education programs to careers in librarianship. These deliverables will be published online in our institutional repository, SPARK. These deliverables could also be adapted for other programs introducing high school students to librarianship.

**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.

Our plan is to make all deliverables freely available from our institutional repository, SPARK. If not hosted on SPARK, all deliverables will be linked to freely available platforms. The monthly student curriculum will be authored using Articulate 360. The toolkit will be created and published on a LibGuide. Deliverables in text format may appear in Microsoft Word and Adobe Acrobat files. A PDF with URLs to all freely available content will be available to share via email. Communication will be facilitated through Zoom and Microsoft Teams.

**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.

The student curriculum will appear in video, audio, and print formats. Recordings will be available for access via SPARK or LibGuide. Recordings of course webinars will be available in MP4 (640 x 480) and MP3 (64 kpbs) formats. Print deliverables such as training plans and event plans will be published as PDF.

### Workflow and Asset Maintenance/Preservation

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

We will follow the workflow as outlined in our Schedule of Completion for the creation of deliverables listed above. Our timeline for meeting planned milestones and deliverables will help us monitor and evaluate our progress.

**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).

We support open access and intend to share our digital assets created via the project through our institutional repository, SPARK under a Creative Commons license.

#### 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).

Our institutional repository, SPARK, uses Dublin Core. We will use the Library of Congress thesaurus.

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

All SPARK content, including metadata, is stored on BePress Digital Commons hosted servers.

**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).

SIUE has been working with our library consortium to develop and document best practices for harvesting content from BePress Digital Commons into PrimoVE, our discovery system. This will allow statewide dissemination. Once we have accomplished this, we will be better equipped to make our deliverables discoverable nationwide.

#### 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).

SPARK is openly available worldwide to anyone with access to the Internet.

**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.

https://spark.siue.edu/library/

#### **SECTION III: SOFTWARE**

#### **General Information**

**A.1** Describe the software you intend to create, including a summary of the major functions it will perform and the intended primary audience(s) it will serve. N/A

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

N/A

#### **Technical Information**

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

N/A

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

N/A

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

#### N/A

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

N/A

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

N/A

#### Access and Use

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

N/A

 $\ensuremath{\text{C.2}}$  Identify where you will deposit the source code for the software you intend to develop: N/A

Name of publicly accessible source code repository:

URL: N/A

# SECTION IV: RESEARCH DATA

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

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

N/A

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

N/A

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

N/A

A.4 What technical (hardware and/or software) requirements or dependencies would be

necessary for understanding retrieving, displaying, processing, or otherwise reusing the data?

N/A

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

N/A

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

N/A

**A.7** Identify where you will deposit the data:

Name of repository:

URL:

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

N/A