

## 1. Statement of Broad Need

This project supports the essential idea outlined by IMLS-LB21 *to broaden participation in the library and archival field and enhance diversity in the workforce*. This project will help supply a much-needed pool of diverse certified school librarians for two urban school districts that have experienced extensive school library closures.

### *Nationwide Loss of Libraries and Qualified Librarians*

The loss of libraries and qualified librarians in the nations' poorest schools has reached a critical mass. Across the country, public school districts have shuttered school libraries and let go of librarians and/or reassigned them to other duties. In a March 2020 article, Nancy Bailey describes the many places that have lost school libraries and librarians in the U.S..<sup>1</sup> Bailey's article provides a synopsis of what's happening in places like New York, Philadelphia, Michigan, California, Virginia, Chicago, Arizona, New Jersey; Charlotte-Mecklenburg Schools, Denver, Florida, Houston and Ohio. A closer look at just the last two states mentioned in Bailey's article reveals the following: "**Houston:** The loss of school librarians began around 2008-2009 school year and got so bad many put bumper stickers that said "Houston We Have a Librarian Problem." Houston started with 168 librarians. By 2013, it had dropped to 97 serving 282 K-12 schools. **Ohio:** In 2015, it was reported that Ohio had lost more than 700 librarian positions over a decade. In that same year, the School Library Journal posted this report, "OH Department of Education Will Vote to Purge School Librarian Requirement."

In Michigan, where this grant project would take place, Bailey's article notes that there was a 73% decline in school librarians between 2000 and 2016. Ironically, this decline came on the heels of a 2003 study done in Michigan which showed that the presence of qualified school librarians and well stocked library collections are positive factors in raising students' readings cores and overall academic achievement. Yet and still, only 8% of schools in Michigan have a school librarian on staff and urban schools have severely widespread vacancies.<sup>2</sup> In 2019, Michigan began retaining third graders with reading difficulties, without having made provisions to rehire school librarians on a large scale.

### *Michigan's Response to School Librarian Shortages*

Wayne State University in Detroit is the only active program in Michigan that offers an ALA accredited program of study leading to certification in School Library Media. Therefore, WSU is uniquely poised to address Michigan's critical shortage of school librarians. In 2018, SIS began offering a new 15 Experimental School Library Certificate Program that builds an abbreviated

<sup>1</sup> Bailey, N. (2020). "There's No 'Science of Reading' Without School Libraries and Librarians, A Predictor of Student Success." *Nancy Bailey's Education Website*, Retrieved from <https://nancyebailey.com/2020/03/01/theres-no-science-of-reading-without-school-libraries-and-librarians-a-predictor-of-student-success/>

<sup>2</sup> Michigan's Center for Educational Performance and Information, 2018-2019 school year.

pathway for teachers to earn library media (ND) endorsement in the same number of hours it takes to obtain a certificate in the School.

### *Urban Youth and Access to Libraries*

Evidence suggests that the neediest learners may benefit the most from trained librarians and quality library programs.<sup>3</sup> Unfortunately, the very kids who have the most need often attend urban public schools where they do not have access to adequate books or credentialed librarians in their school or local branch libraries. A study ranked school library programs based on certified staffing, library accessibility, resources, and technology and found that “the one key factor distinguishing high-performing high-poverty schools from low-performing high-poverty schools is a quality library program.”<sup>4</sup> Yet, school administrators often do not have professional guidance and concrete data upon which they can make decisions about whether and/or how to restore their closed school libraries. Many cities across the country have established partnerships between public and school libraries to share the already limited resources they have. For example, Limitless Libraries is a partnership program between Nashville Public Library and Metropolitan Nashville Public School that offers a wealth of information to model this project after.

### *Mentorship Matters: Retooling Future School Librarians*

Since so many school libraries have closed, it is critical that future librarians receive hands on mentorship to assist them in understanding the full spectrum of work in a well-functioning school library. Yet, it is no longer sufficient to focus advocacy efforts on the importance of rehiring school librarians. Instead, external stakeholders must see the importance of retooling the educator workforce with school librarians who are the skilled professionals that can help make a difference in students’ lives, especially an era of fake news, information overload and e-learning.<sup>5</sup>

Yet, beyond their school librarian preparation coursework, future school librarians have very few opportunities to see what transformational change in school libraries looks like in practice. This barrier was significantly reduced in 2015 with the launch of The Lilead Project (IMLS #RE-40-16-0166-16). According to its website, the Lilead Fellows Program is “a network of activists – district-level school library supervisors who work together and with others to bring about change in schools, communities, and the profession.” (see <https://lileadproject.org/>) This program supplies a much-needed pool of prospective mentors for future school librarians who can help them think deeply and differently about why school libraries exist and how they can make a difference in learning communities.

<sup>3</sup> Lance, K.C. & Kachel, D.E. (2018). Why school librarians matter: What years of research tell us. *Phi Delta Kappan*, 99 (7), 15-20.

<sup>4</sup> Coker, E. (2015, April). *The Washington state school library study: Certified teacher-librarians, library quality and student achievement in Washington state public schools*. Seattle, WA: Washington Library Media Association

<sup>5</sup> Agosto, D. (Ed.). (2018). *Information literacy and libraries in the age of fake news*. ABC-CLIO.

### *Paradigm Shifts in Student Learning*

There has been a paradigm shift shaping the way today's youth live and learn in the digital age.<sup>6</sup> Amidst these technological shifts, K12 administrators are facing increased pressure for their students to perform well on traditional literacy assessments or risk losing accreditation, funding and academic oversight. For the aforementioned reasons, school librarians must adopt new ways of engaging students that connect traditional reading and academic learning with their peer culture, interests and pervasive social media habits.

### *Hip Hop Culture & Hip Hop Based Education (HHBE)*

According to a report by Nielsen music, hip hop is now the most revenue-generating genre of all music types.<sup>7</sup> In 2017 Google honored the forty-fourth anniversary of the birth of hip hop with an interactive Google Doodle that featured a graffiti-style logo on the Google homepage seen by people all over the world.<sup>8</sup> Although it is difficult to validate their statistics, a number of media sources report some variation of figures indicating that 24 million people between the ages of 19–34 from around the world comprise hip hop's primary listening audience, with Black listeners at 46%, Hispanics at 25%, and the remaining percentage of listeners biracial.<sup>9</sup> In terms of behavior, hip hop fans are at the forefront of the digital movement, with 18% saying they like to be among the first to buy new media technologies. This fan base is also more likely than the average person to be interested in gaming/purchasing a gaming console. With such a substantial segment of the population participating in hip hop culture, there is a tremendous opportunity for school librarians to leverage Hip Hop culture in their programs, instruction and collection development strategies. Scholars in the field of education are advanced in thinking about the role HHBE can or should play in K12 schools.<sup>10</sup> The school library field has a dearth of scholarship in this area, with a few notable exceptions.<sup>11</sup>

<sup>6</sup> Braun, L., Hartman, M., Hughes-Hassell, S., & Kumasi, K. (Jan 2014). *The Future of Library Services for and with Teens: a Call to Action*. [A white paper report opened for a national review by the Young Adult Library Services Association]. Accessed March 10, 2020 from <http://www.ala.org/yaforum/project-report>

<sup>7</sup> Hugh McIntyre, "Report: Hip-Hop/R&B Is the Dominant Genre in the U.S. for the First Time," *Forbes*, July 17, 2017, <https://www.forbes.com/sites/hughmcintyre/2017/07/17/hip-hoprb-has-now-become-the-dominant-genre-in-the-u-s-for-the-first-time/#52f813f25383>.

<sup>8</sup> "44th Anniversary of the Birth of Hip Hop," August 11, 2017, <https://www.google.com/doodles/44th-anniversary-of-the-birth-of-hip-hop>.

<sup>9</sup> Gaille, Brandon. "25 Good Hip Hop Demographics." *BrandonGaille: Marketing Expert and BlogMaster* (audio blog), February 5, 2015. Accessed March, 10, 2020. <https://brandongaille.com/25-good-hip-hop-demographics/>.

<sup>10</sup> Porfilio, B. & Viola, M. Hip-hop (2012): *The Cultural Practice and Critical Pedagogy of International Hip-hop* pp. 181-196. Peter Lang Press.

<sup>11</sup> Johnson, J. (2017) Sparking Engagement with Hip Hop. Accessed , March 10, 2020 from <https://www.edutopia.org/blog/sparking-engagement-hip-hop-joquetta-johnson>

## 2. Project Design

**Goal 1:** Attract teachers from two urban school districts to become certified school librarians

*Project RUSL: Restoring Urban School Libraries* is a three-year **master’s level/ project** grant that will provide education, mentoring and professional development for 6 diverse classroom teachers who currently work in two local urban school districts (Harper Woods & River Rouge) to become certified school librarians. This grant project can help reverse the disturbing trend in of school library closures across the nation. While this student cohort is small, the outcomes and model being piloted will be well documented and disseminated for nationwide replication and impact.

Wayne State University’s School of Information Sciences, located in Detroit, will pilot a new culturally responsive curricula and an immersive practicum experience within its existing Experimental School Library Certificate Program. Of the thirty-eight new (38) students who enrolled in this experimental program, only one is a teacher from an urban school district in Metro Detroit. The remaining students are primarily comprised of teachers from suburban school districts in Metro Detroit. Therefore, this grant project will help spur a rebirth of urban school libraries in Michigan by forming a strategic partnership with two urban school districts in Metro Detroit—Harper Woods and River Rouge.

The table below provides an overview of the plan of work for the Experimental School Library Certificate Program which can be completed in one (1) year.

Plan of Work \*

Type	Dept	Course	Course Title	Cr	Clinical Hrs
online	INF	7310	School Library Media Programs	3	22
online	INF	7320	The School Librarian as Teacher and Instructional Consultant	3	22
online	INF	6520	Survey and Analysis of Literature for Children: Grades k-12	3	22
online	INF	7410	Technology in School Libraries	3	22
hybrid	INF	7980	Immersive Practicum: SLM*	1-3	90hrs

\* NEW immersive practicum being piloted for grant recipient cohort only 15cr Total

**Goal 2:** Develop a new model of mentorship for school librarians-in-training

Each of the four content area courses (7310 7320 6520,7420), will have a NEW embedded field experience component where the students observe practicing school librarians carrying out the various roles and responsibilities of school librarians in real school settings using Swivl, “the most trusted video tool in K12, perfect for field experience teaching”(see <https://www.swivl.com/>). The instructors for these courses will meet to coordinate the field experience criteria and develop a grading rubric. At the kick-off workshop, the student participants will be paired with a mentor and both groups will receive onboarding and instructions for fulfilling their respective roles. The mentors will have the option to attend the kick-off workshop in person or virtually since they will be learning how to support video-

enhanced instructional coaching and personal educator reflection as part of their onboarding. Mentors will interact with their school library student mentees through virtual conferences and video-recorded professional development throughout each semester in connection to graded assignments where they observe evidenced based practices such as: Guided Inquiry, Bibliographic Instruction; Booktalking; Circulation; Curating E-Resources, Engaging Students with Social Media, etc. The mentors will be responsible for ensuring video recordings are made of the various teaching and learning practices that will be agreed upon during the kick-off workshop. Each mentor will receive a Swivl device to take back to their respective districts and record best practices in the school library to share with the preservice school librarians in their field experience/immersive practicum courses.

The mentors who are chosen to be a part of this project will primarily be sourced from a network of school library district supervisors who participated in a leadership development program called *The Lilead Project* (IMLS #RE-40-16-0166-16). The Lilead Project has cultivated a thriving community of school library leaders who can serve as mentors to the future school librarians in this grant project. As described on its website, the Lilead Fellows Program is “a network of activists – district-level school library supervisors who work together and with others to bring about change in schools, communities, and the profession (see <https://lileadproject.org/>). There have been two cohorts of Lilead fellows since 2015 and over fifty alum of the program to date. Additionally, each cohort was guided by a group of mentors, including the project director, Dr. Kafi Kumasi, who served as a mentor in both the 2015-16 and 2017-18 fellow cohorts. Through their participation in Lilead, the fellows have engaged in a wide range of professional development activities including research and reflection, peer-to-peer interactions, collaborative problem-solving, and mentoring. Two Lilead fellows have formally expressed interest in serving as mentors for this grant project by writing letters of support.

### **Goal 3:** Educate school librarians Hip Hop Based Inquiry (HHBI) & multicultural book curation

A kick-off summer workshop will be convened at Wayne State University in Detroit with a video streamed component for online participation. The goal of the workshop is twofold: 1) to orient the newly admitted school library students to SIS Experimental School Library Certificate Program and pair them with mentors and 2) to prepare school librarians to implement HHBI into their districts. To that end, this project will not only train school librarians on their traditional roles as Program Administrators, Instructional Partners and Information Specialists, but also foreground a new role of school librarians as Cultural Teachers. Project Director, Dr. Kumasi, has developed an information behavior model called INFLOmation that can help researchers and practitioners better study and support youth’s information behaviors grounded in the principles of hip hop culture<sup>12</sup> Also, during their SLM coursework, the participants will build libguides featuring multicultural book collections and lesson plans that will be publicly available on the Michigan #GoOpen lesson database and on the Project director’s website. Dr. Kumasi regularly teaches INF 7320 and has developed assignments that would support the creation of libguides featuring multicultural book curation and collaborative lesson plans (see <https://waynesis.libguides.com/starthere>).

<sup>12</sup> Kumasi, K. (2018). INFLO-mation: A Model for Exploring Information Behavior through Hip Hop. *The Journal of Research on Libraries and Young Adults*, 4(1) [http://www.yalsa.ala.org/jrlya/wp-content/uploads/2018/11/INFLO-mation\\_Kumasi.pdf](http://www.yalsa.ala.org/jrlya/wp-content/uploads/2018/11/INFLO-mation_Kumasi.pdf)



**Goal 4:** Build infrastructure for two school library programs

In order to build a sustainable school library program, there needs to be a multifaceted set of activities taking place concurrently. Foremost, building the online presence of the two new school library programs will be a central focus throughout the project. At the outset, a SIS graduate student will be hired to build a website template for the respective school library programs alongside building website for the grant project. The school librarian participants will be taught how to add content to the website/libguides and will be given coursework assignments that require them to learn the technical components of curating resources, managing collections, leveraging social media and more.

Given the limited budgets of the participating school districts it is imperative that resources are maximized and secured. One resource that is being currently underutilized in both districts is the local public library. Therefore, in their school library programs course (INF7310), the student participants will be required to develop a book lending and cooperative resource sharing policy with the two participating public library directors. This policy will drive a number of activities that take place over the course of the grant and will be documented via a featured tab on the new school library websites. At the kick-off workshop, participants will also be able to demo the technologies that will be purchased for the grant such as the Swivl robots that will be used for recording observations of learning in the library for the immersive practicum as well as the chromebook laptops and Hip Hop vocabulary software that will be used with K12 students.

**Project Team:** The project director, **Dr. Kafi Kumasi**, is an Associate Professor in the School of Information Sciences at Wayne State University. Dr. Kumasi served as a mentor in the Lilead Project (2015-2018) and spearheads [a new Experimental School Library Media Certificate Program](#) at Wayne State. Dr. Kumasi is the lead instructor for all courses in the school library certificate courses and regularly teaches INF7320: *The School Librarians as Teacher and Instructional Consultant*.

**School Library Practicum Coordinator-** Help coordinate and implement the NEW immersive practicum experience across all the school library media certificate courses. Help manage the acquisition and development of a video library of best practices produced by the project mentors and student participants to count towards field experience hours.

**Kathleen McBroom**, *Practicum Coordinator*, School Library Media, Wayne State University, School of Information Sciences, 2017-*current*.

**Confirmed school library mentors** Provide on-demand mentorship and professional development and video recorded best practices in connection to the immersive practicum experiences to support the school library candidates. Additional mentors to be recruited from the pool of fellows in The Lilead Project.

**Stephanie Ham**, *Director of Library Service*, Metro Nashville Public Schools, Fellow, the Lilead Project

**Carolyne Foote**, *District Librarian/High School Librarian*, Westlake High School, Fellow, The Lilead Project

**Tatanisha Love**, *Middle School Librarian*, Baltimore County Public School System

**Confirmed Digital Librarian Consultant-** Provide technical assistance for establishing libguides and using OPALS library management software for two k12 school libraries

Karen Lemmons, *Teacher/Library Media Specialist*, Detroit School of Arts

**Confirmed K12 district administrator partners:** Allow three classroom teachers flex time to build school library duties into their teaching assignments with goal of restoring at least one full time equivalent (FTE) School Librarian position and one .5 FTE School Librarian Coordinator position after grant concludes

**Derrick Coleman**, *Superintendent*, River Rouge School District.

**Steven McGhee**, *Superintendent*, Harper Woods School District

**LaToiya Tolliver-Revell**, *Principal*, River Rouge STEM Academy

**Radu Iacoban**, *Interim Chief Academic Officer*, Harper Woods School District

**Confirmed Public Library Partners:** Develop a cooperative lending model with the partner schools and work with grant recipients on their immersive practicum projects

**B. Kristen Valyi-Hax**, *Director* Harper Woods Public Library

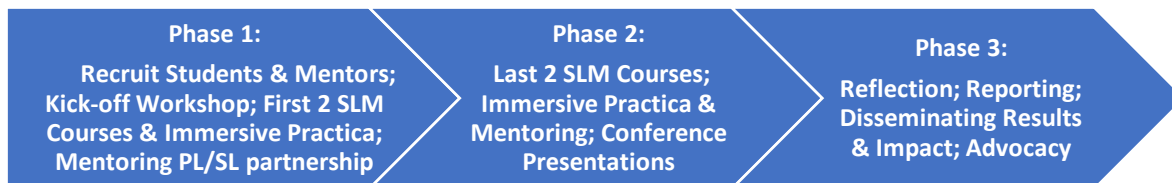
**Gurpreet Samra**, *Director*, River Rouge Public Library

**Confirmed Workshop Presenters-** To deliver interactive, inspiring professional development for grant kick off workshop on Infusing Hip Hop in School Libraries (iHUSL). Additional presenters on inquiry-based learning and peer coaching will be sought.

**Joquetta Johnson**, *Specialist, Department of Equity and Cultural Proficiency*, Baltimore County Public Schools, Lecturer Morgan State University, 25 years K12 school librarian experience.

## Work Plan/Activities

The Project RUSL will be carried out in three phases that generally correspond to the three years of the grant described below.



## Year 1

- Identify & recruit school librarian (SL) candidates & workshop facilitators
- Form school library mentor council from The Lilead Project network
- Draft kick-off workshop outcome assessments for presenter & mentor feedback
- Form and convene school/public library partnership meetings to establish policies and practices for cooperative lending
- Purchase equipment & software for school libraries to demo at kickoff workshop and begin distributing through immersive practicum course projects.
- Enroll 6 school librarian candidates by summer semester enrollment deadlines

- Conduct kick off workshop on *Infusing Hip Hop in School Libraries* (iHUSL) & pre-assessments
- Deliver first two classes in 15hr certificate program
- Build school library website/libguide templates in consultation with Digital Librarian
- Pilot book lending model with public and school library within practicum courses
- Provide on-demand virtual mentoring and professional development to 6 school librarian candidates

## Year 2

- Deliver last two classes in 15hr certificate program
- Provide on-demand virtual mentoring and professional development to 6 school librarian candidates
- Coordinate & sponsor student participation at MAME annual conference Fall 2021
- Document and share evidenced based practices from immersive practica and coursework
- Host wrap-up meeting at Wayne State to conduct reflections and conduct post assessment

## Year 3

- Disseminating project results & impact in journals, conferences and websites
- Prepare a white paper report for school districts on scaling and sustaining restored school library programs
- Establish ongoing professional development system among school library participants
- Document and share curricula from immersive practicum and coursework on a new project RUSL website

## Diversity Plan

Project RUSL has a two-part diversity plan which includes: 1) Targeted recruitment of master's students from historically under-represented populations; 2) Showcase the role of school librarians in supporting culturally responsive teaching and social justice education.

The consistent presence of people of color in the field through diversity-based scholarship programs has been shown to make a positive impression on other people of color who not have considered librarianship as a career due to lack of role models.<sup>13</sup>

The teachers who will be selected to participate in this project are working in urban communities that are comprised primarily of students and teachers from historically disenfranchised racial/ethnic backgrounds (e.g. African American, Latinx). The teachers will be chosen based on their desire to pursue training to become school librarians and to develop culturally responsive, inquiry-based programs and activities within the new library spaces.

<sup>13</sup> Sands, A.E., Toro, S., DeVoe, T., Fuller, S., and Wolff-Eisenberg, C. (2018). Positioning Library and Information Science Graduate Programs for 21st Century Practice. Washington, D.C.: Institute of Museum and Library Services.



## **Broad Impact**

It will take a multifaceted approach to reverse the disturbing trend of disappearing school librarians in K12 schools across the nation. This project will directly impact two urban school districts by training 6 classroom teachers to become certified school librarians who can deliver culturally responsive school library programs upon the project's conclusion.

This project has potential to lead to systemic changes in how we prepare school librarians in an educational landscape where school library programs are by and large defunct or understaffed. The piloting nature of the project's NEW immersive practicum experience and online mentoring component can serve as a model for how districts can grow their own school library programs from within their existing classroom teacher ranks with the support of virtual school library mentors from across the nation.

Wayne State University has capacity to scale up this model should there be an increased demand for districts in Michigan to send their classroom teacher to earn the school library endorsement. Since the coursework will be delivered online through the Canvas Learning Management System and the mentorship being piloted will take place online, this work could be scaled up to meet the demand of school library vacancies in Michigan by hiring more adjunct instructors to teach the required SLM courses at Wayne State University. Moreover, other school library certificate programs across the country might adopt the immersive practicum model to help districts grow their own school librarians once the results and exemplars are shared online, at conferences, and in publications.

The project director will establish a website for publicly sharing the key components of project RUSL such as: the SLM coursework, immersive practicum, workshop on Hip Hop inquiry, K12 student project showcased and video exemplars of evidenced based learning in the library.









## 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.

All digital products will be licensed under open source or Creative Commons Attribution-ShareAlike 4.0 (CC BY-SA 4.0) License (<https://creativecommons.org/licenses/by-sa/4.0/>). The CC license will be visible on workshop materials, videos with hyperlinks and URLs. The goal of using a CC BY-SA 4.0 license is to increase the broad impact of project RUSL by making workshop materials, website pages and professional development videos as widely available as possible. Additionally, we will disseminate lessons and videos via #GoOpen Michigan, a community of educators and learners who access and contribute free, openly licensed, high quality digital resources to enable equitable transformative learning. Lessons, videos workshop materials will be shared via local and national conferences, allowing participants to download and use materials.

**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.

Wayne State University will not assert ownership rights for grant products. Digital products will be hosted by #MiGoOpen, an open access institutional repository or will be shared freely on the project director's website with educational fair use attribution and CC license visible on all information. Any digital products created featuring K12 students will be used with proper parental permissions. Teachers who create videos will have their own login credentials to the software products used to record videos (e.g. Swivl) and the project director will oversee membership access to the video creation component. Grant products will be made freely available with no conditions of use beyond those carried by the CC license or relevant terms and conditions.

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

Written permission will be obtained for any K12 classroom/school library videos created during the immersive practicum indicating to parents that the purpose for videotaping is to share, assess, and improve the quality of instruction. This purpose will be communicated in more than one place and on more than one occasion to help parents feel more comfortable about granting filming permission. Otherwise, the use of the videos for professional development falls under fair use as it will meet the "transformative" threshold of discussing and reflecting on the material beyond just re-distributing the content as a whole. Regarding the



## 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.

Digital content will be created for workshops, school library preparation coursework, professional development for the project participants and the school/public library partnership. This will include documents to aid participants in facilitating inquiry based learning projects at the kick-off workshop, libguides created by preservice students during their preparation coursework, video libraries created during the immersive practicum experiences and website pages created for the school/public partnerships. Documents will be tailored to the individual school districts' needs, and so will result in as many different kinds of documents as participants and project team members.

**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.

Documents, lessons, videos and websites and other digital products for Project RUSL will be developed on laptop and desktop computers, iphones, and Swivl camera recording technologies. Traditional and open access word processing tools such as Google Docs will be used by members of the project team.

**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.

Documents, website, videos, reports, presentations, and other digital products will be developed using word processing software, such as Microsoft Word, Microsoft PowerPoint, Google Docs, libuide software such as Springshare, video recording tools using Apple or Android technology and will be exported as PDF, Mp4, XML, PPTX, Mp3, DOC documents as appropriate.

### Workflow and Asset Maintenance/Preservation

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

Quality control will be exercised via an iterative development process between project director, Dr. Kumasi, team members and grant recipients. Team members will meet regularly via web conferencing software to prepare for various workshops and prepare documents, and digital products.

**B.2** Describe your plan for preserving and maintaining digital assets during and after the award period. Your plan should address storage systems, shared repositories, technical documentation, migration planning, and commitment of organizational funding for these purposes. Please note: You may charge the federal award before closeout for the costs of publication or sharing of research results if the costs are not incurred during the period of performance of the federal award (see 2 C.F.R. § 200.461).

Digital products will be hosted on Wayne State University website page created by Dr. Kumasi for the grant project as a whole. Lesson plans and libguides created during school library coursework will be housed on Michigan's Go Open Website, a shared repository of educational resources hosted by the Michigan Department of Education and used by educators statewide and beyond. The project director and participating school librarians, mentors and team members will have access to all video content and libguide maintenance created by the participants during the subscription service period for Swivl and Springshare respectively.

## 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).

Metadata for digital content (e.g. lesson plans, libguides) created by the project RUSL team and participants will be created at time of deposit in Michigan #GoOpen, will use institutional repository standards and metadata structures.

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

Metadata files will be preserved with the same methods described in section B.2.

**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).

Wayne State University's website and Michigan #GoOpen are both widely discoverable on the open web with social media integration features that will be used to amplify the online presence of project RUSL and its related digital products by establishing a social media profile on Twitter, Facebook, Instagram, etc for the grant project.

### 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).

The project website and social media tools described in C.3 will be used to make the digital assets available to the public.

**D.2.** Provide the name(s) and URL(s) (Universal Resource Locator), DOI (Digital Object Identifier), or other persistent identifier for any examples of previous digital content, resources, or assets your organization has created.

## SECTION III: SOFTWARE

### General Information

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

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

### Technical Information

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

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

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

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

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

## Access and Use

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

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

Name of publicly accessible source code repository:

URL:

## SECTION IV: RESEARCH DATA

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

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



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

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

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

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

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

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

Name of repository:

URL:

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