Narrative: A Blueprint for Equitable Open Educational Practices

Roger Williams University (RWU), on behalf of its University Library, the NC State University Libraries, and the Open Education Network (OEN), requests a two-year, **$96,540** LB21 Planning Grant to develop a Blueprint for Equitable Open Educational Practices (OEP) and to pilot a training program in partnership with the OEN that prepares librarians and faculty to be partners in this timely work. As awareness of Open Educational Resources (OER) continues to grow as a tool to make postsecondary education more accessible, academic librarians are now being asked to lead faculty in the exploration and implementation of OEP. This grant would allow us to develop a flexible Blueprint that would enable actionable pathways for librarians and faculty to collaboratively create equitable, inclusive and sustainable educational practices.

Statement of Broad Need

The COVID-19 pandemic has necessitated a turn towards online learning, highlighting the need for accessible learning materials. While online learning may reduce barriers related to time and geography, thereby increasing accessibility, expensive or paywalled resources remain substantial barriers to learning (Florida Virtual Campus, 2019). OER (Open Educational Resources) may further reduce barriers because they are free teaching and learning resources and can be downloaded and retained in perpetuity. The Open Education community recognizes the importance of expanding this work even further, moving beyond a narrow focus on affordability and accessibility to include the exploration of transformative pedagogical opportunities afforded to faculty and students by OER, often called Open Educational Practices (OEP).

OEP, as embodied in values and practices such as learner-driven control of student work, critical understanding of and engagement with technology and privacy, and inclusive learning, is at the heart of open education. While the definition and application of OEP continues to evolve, as a foundation we are using Cronin's (2017) inclusive definition: "collaborative practices that include the creation, use, and reuse of OER, as well as pedagogical practices employing participatory technologies and social networks for interaction, peer-learning, knowledge creation, and empowerment of learners."

In 2019, the Open Education Network (then the Open Textbook Network) in collaboration with the Association of College and Research Libraries (ACRL) and Creative Commons created a professional development program for academic librarians: the OER Librarian Bootcamp (RE-70-17-0073-17). This program was designed to train participants to build sustainable,

collaborative, and effective open education programs on their campuses and to equip them with the tools to assist faculty who wish to adopt OER. Now in its third iteration as the [Certificate in OER Librarianship](), faculty are expressing a parallel interest in exploring how to engage more fully and confidently in OEP as a means to improve their pedagogy and to make their curriculum more responsive, diverse, inclusive, and equitable. A 2019 study found that teaching faculty are also interested in OEP that would encourage students to share their work with each other as well as with the broader community and to address concerns that student scholarship ends at the professor (Paskevicius and Irvine, 2019).

OER as a field is ready, and both new OER librarians and teaching faculty have explicitly called for guidance on developing and using OEP. We believe that academic librarians are uniquely situated to help facilitate this process in collaboration with their faculty partners because of their expertise in information literacy and curation, their professional training on copyright and fair use, and their unique positions on campus poised to interact with many departments. Faculty and librarian anxiety and lack of preparation, however, have been identified as significant barriers for instructors who are otherwise excited about OEP.

In order to meet these needs and support these partnerships, librarians Lindsey Gumb and Will Cross, along with faculty instructor Heather Miceli have been conducting research on OEP as Hewlett- and Gates Foundation-funded Open Education Fellows. Their initial research makes it clear that faculty and librarians only "know what they know;" if they are lacking some understanding of (for example) student privacy, copyright, or issues of information privilege, their students may not get the full benefit of learning through OEP, particularly through a social justice lens that allows for more equity-centered practices.

The time needed to develop those skills and that knowledge can be extensive - for many faculty engaging in OEP there is significant trial and error that often happens within disciplinary silos. In order to explore these practices and deconstruct these silos, faculty and librarians need a Blueprint to provide expertise and build an interdisciplinary community of practice with peers who may otherwise lack both the encouragement and the resources to incorporate OEP into their pedagogical practices and professional toolkit. Significantly, there is a natural but underexplored intersection between OEP and critical librarianship that "takes into consideration the social, political, economic, and corporate systems that have power and influence over information production, dissemination, access, and consumption" (ACRL Framework). BIPOC (Black, Indigenous, and People of Color) scholars have

historically and continue to experience barriers to traditional scholarly publishing opportunities. By working together to develop learning opportunities for faculty and librarians to explore the source of these inequities, examine modern examples, and finally invite their students into these conversations, OEP can help them recognize their own role in systemic inequity by exploring other diverse scholarly circles of information production by non-dominant scholars. By directly aligning OEP to frameworks for critical librarianship and social justice such as Lambert (2018), we can help engender a model for understanding and evaluating OER and OEP through a social justice lens. Instructors and librarians need to understand OEP through a lense of critical librarianship in order to make it more effective and just. To do that work, they need a blueprint for action and clear models for putting that blueprint into practice in order to use OEP for systemic curricular change.

Project Design

In order to support broad adoption of collaborative OEP that center equity and social justice, we propose a two-year research and pilot process in collaboration with the Open Education Network (a higher education community of 1,147 campuses committed to working together in order to build sustainable open education programs). Our team includes OER Research fellows and professional librarians Gumb and Cross, Research Fellow and faculty instructor Miceli, as well as Tanya Grosz, Director of Educational Programs for the OEN. Over two years we will do the following:

1. Deepen our understanding and diversify the voices and practices centered in open education and OEP by interviewing and amplifying underrepresented open practitioners, both faculty instructors and academic librarians;
2. Build community around a social justice framework for OEP by bringing these expert practitioners into conversation with teams of librarians and faculty instructors committed to OEP through a series of symposia hosted at the beginning, midpoint, and at the end of a formal training program being developed in partnership with OEN; and
3. Partner with OEN to develop and pilot a two-semester Fellowship in OEP built around a social justice framework for faculty and librarians informed by this research.

1. <u>Research Stream on Equitable Open Educational Practices</u>

The PI's will begin with a broad series of interviews, surveys, and focus groups with leaders and practitioners from a diverse set of institutions and intersectional identities. We will benefit from the

groundwork laid by Gumb, Miceli, and Cross' existing Hewlett-funded research work as well as the deep connections offered by our partnership with OEN and specifically engaging underrepresented open educators and those who are building practices that center equity and inclusion in their work. In identifying these educators, we will work with partners situated within underrepresented OER communities such as the HBCU Alliance OER program (RE-36-19-0089-19) which Cross serves on Advisory Board and the 200+ tribal and community colleges that Grosz regularly works with through the OEN. These interviews and focus groups will follow a referral sampling approach that builds on the initial interviews conducted as part of our current research. This research will be ongoing throughout the two-year program, with new insights gleaned from this work fed into the OEN Fellowship program described below and experiences from that program brought back into the research being done with educators and students. All research will be done online to address the immediate need to protect participants' health and safety during the pandemic, and will continue online through the project as needed to reduce barriers to participation.

2. Symposia Connecting Research and Practice

With a deeper and more representative set of models for OEP, Gumb, Cross, and Miceli - in consultation with Grosz - will be prepared to gather a diverse group of these expert practitioners for a series of three symposia. In each case we will be intentional about centering both library and instructional expertise as a way to demonstrate the value of these complimentary skills and the necessity of integrating them into a holistic body of open educational practice. As above, our recruitment will focus on underrepresented communities and will benefit from our deep working relationship with open education organizations in these spaces. These gatherings will be designed to support information exchange with the OEN Fellowship program described below.

- **Curriculum Design Symposium** - The initial symposium will be held during the curriculum design process in the fall of 2021 and invite designers for the Fellowship program (including the PIs on this grant) to provide insights and examples that will inform the curriculum of the program. The invited program designers will also help refine our research questions and processes for ongoing interviews across the field.
- **Project Design Symposium** - The second symposium will be held in the summer of 2022 (perhaps at OEN's annual Summit), at the midpoint of the Fellowship program as Fellows are preparing to begin their project work. This gathering will include PIs, instructors, and Fellows (both librarians and faculty instructors), who will come together

to discuss updated research findings and apply them to their project design. Again, all participants will help refine our ongoing research questions and may choose to partner on targeted research to support development and assessment of their specific projects.

- **Sustainable Training Design Symposium** - The third symposium will bring together PIs, selected OEN stakeholders, course designers and participants, and invited experts from our research to synthesize our shared work and chart a path forward. We will gather in the spring of 2023 to discuss next steps for our research and for the OEN Fellowship Program, with an eye to moving from a research-driven pilot program to a sustainable, ongoing resource for the open education community that centers collaborative expertise in support of social justice as the animating force for our work.

At each symposium we will also develop and share a written Blueprint for Supporting Equitable Open Educational Practices that includes research-driven models for good practice and related educational materials that have been piloted in the Fellowship Program. We expect that the Curriculum Design Symposium will be held fully online and are prepared for all symposia to be held online if needed to reduce barriers to participation and assure participants' health and safety during the pandemic.

Each symposium will be based on successful invitational planning events such as MIT's *Workshop on Diversity, Accessibility, and Inclusion in Library Systems* (LG-73-17-0162-17) and NC State's *Symposium on Using OER to Support Scholarly Communication Instruction* (LG-72-17-0132-17). The symposia will be built with framing activities before, and writing, commenting, review, and dissemination activities following. These major activities may include an online survey of perceived gaps; creation of a bibliography and set of use cases; creation of an extended reviewer and participant database; workshop preparation logistics; workshop hosting and facilitation; drafting of the workshop report with selected key participants; dissemination of the report for public commentary and expert review; incorporation of public commentary and expert review; publication of the final report; and dissemination of summary reports through professional venues.

3. Partnership with the Open Education Network to Pilot a Training Program

As discussed above, the PIs will also partner directly with the OEN to develop and pilot a training program to prepare faculty and librarians to implement equitable OEP at their own institutions. OEN's IMLS-funded Certificate in OER Librarianship (RE-70-17-0073-17) has been a national model for impactful, sustainable professional library education on open education. In

partnership with the PIs, OEN and Tanya Grosz, their Director of Educational Programs, are prepared to develop a parallel, two-semester Fellowship in Open Educational Practice intended to "create curriculum through the lens of equity that serves as a pathway to Open Educational Practice for faculty and those who support faculty."

In the summer of 2021, Grosz will lead OEN's efforts to convene an initial set of instructors with both library and instructional expertise, including Gumb, Miceli, and Cross, who will build on our research and begin development of the curriculum as a group, culminating with a two-semester Fellowship for open educators to be held across 2022. In the spring of 2022, Fellows will complete an online course in foundational issues related to OEP presented through a social justice lens. In the fall they will bring these lessons back to their home institutions and implement projects informed by their coursework and our research. As curriculum designers and instructors for this program - as well as conveniners of the symposia discussed above - we will be well-situated to connect our ongoing research stream with these practitioners so that their work benefits from research insights and can, in turn, inform the ongoing evolution of that research stream. Taken together, we believe this feedback loop will create a powerful virtuous cycle of work that will connect theory and practice to support more inclusive, equitable, and impactful open educational practices.
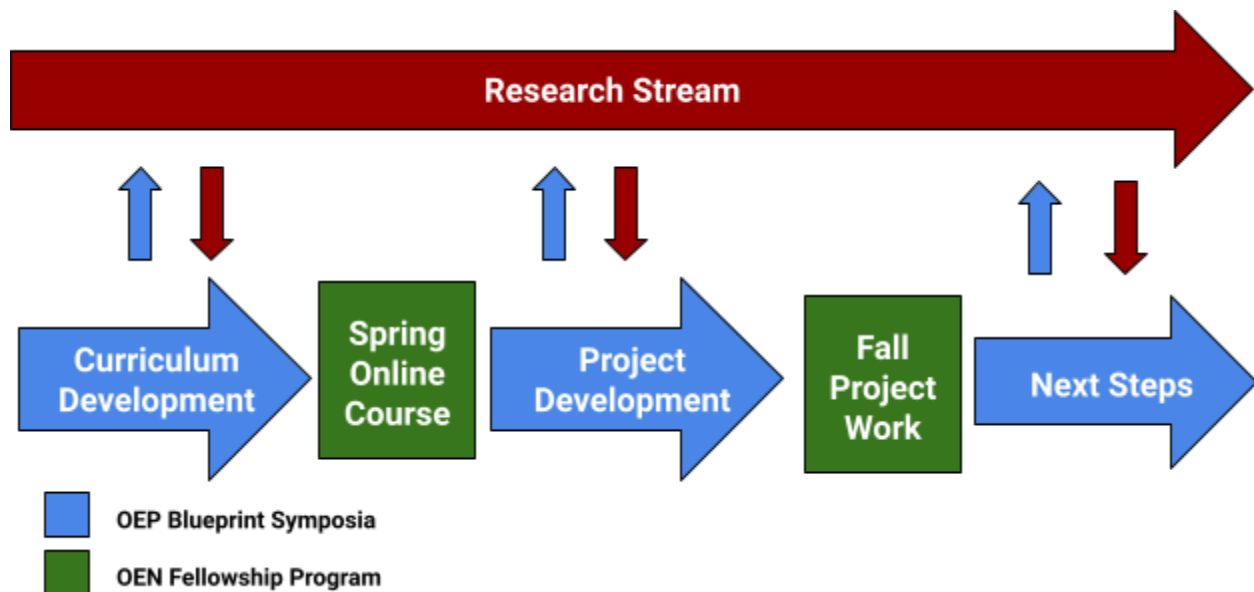
Assessment and evaluation of this project is built directly into the work, with annual review of the impact of our research and development done in conjunction with each of the symposia through formal means such as surveys and by evaluating efficacy in practice as applied to the Fellowship program itself. The Fellowship program will also conduct formal assessment similar to that done for

the 2017 OER Certificate program, and we will also collect data on the impact of our research through standard review of engagement and use such as citations and professional presentations.

Diversity Plan

All aspects of this project are designed to center diversity, equity, and inclusion. The research stream invites a diversity of perspectives into the conversation about OEP with the explicit ongoing goal of incorporating and centering those voices when defining the challenges and opportunities of OEP and creating and implementing both the symposia and the Fellowship Program. Our research methods are designed to engage individuals and communities that are not adequately recognized and represented and we believe that this iterative, invitational approach connecting theory and practice can build a more authentic connection between the lived experiences of underrepresented practitioners and the models we hold up as "best practices" for OEP. We will also benefit from deep connections with partners working in community colleges and Tribal Colleges and Universities within the American Indian Higher Education Consortium (AIHEC) through the OEN as well as open educators working in HBCUs through the HBCU Alliance.

The symposia and Fellowship Program will likewise be designed to explicitly center social justice. In 2020 OEN announced a new name for the organization meant to align with a renewed commitment to equity and inclusivity and a broader focus on OEP. Working together, OEN and the PIs intend for the new Fellowship Program to reflect these commitments at every stage. Recruitment of curriculum designers and the first cohort of Fellows will be done intentionally in ways that strengthen the field's commitment to diversity, equity, and inclusion, including recruitment with partners described above.

By grounding our discussion of OEP explicitly in social justice through the use of critical librarianship, we hope to make the foundational ideas and practices clearly intersectional, anti-racist, and responsive to inequities in our society, from systemic racism to the digital divide. This project also seeks to move the conversation in the open education community beyond what has been mostly what Lambert (2018) coins Redistributive Justice - increasing access/reducing barriers to participation in the form of free, openly licensed texts - towards promoting projects that focus on Recognitive and Representational Justice: increasing the diversity of individuals represented in the texts and practices, and focusing on the voices of marginalized individuals in the creation of the texts and practices.

The Fellowship Program will prepare open educators to build more equitable policies and assignments that value students' work, help all students see themselves represented in the materials, and have meaningful agency in the tools they use and contributions they make. It will also challenge educators and students who often only see themselves represented in the materials to ask the critical question "Whose voice(s) isn't represented in the sources? And why?" By centering underrepresented voices and practices, we hope to offer a more just pedagogy. By empowering librarians and educators to do this work collaboratively, we hope to make this pedagogy more meaningful and sustainable.

Broad Impact

In order to cultivate a successful shift from the narrow focus on the cost saving benefits of OER towards the broader pedagogical benefits of OEP, the academic community needs a foundational yet flexible blueprint to reference. The impact of this work will be magnified by partnership with the Open Education Network, which serves a vast and diverse network of postsecondary institutions and systems in the United States and has a strong reputation for providing quality professional development opportunities for librarians and educators.

Through this pilot program, academic librarians introducing faculty to OEP can create stronger collaborations and opportunities to engage with students at their time of need, providing a more authentic and holistic integration and application of the information literacy framework for higher education. Librarians as partners in OEP can increase collaborative opportunities with teaching faculty that have not traditionally been realized, which then organically presents an opportunity to expose our students to larger concepts such as information privilege and the implications of systemic racism on scholarly publishing and questions about whose voices are represented in curricular materials. Developing an awareness of what information privilege is and how they can use their own contributions to break down systemic barriers, students then develop a sense of responsibility toward the broader community, which we know is critical for a healthy democracy (Baran and AlZoubi, p. 238).

It is through librarians' instructional collaborations in the classrooms that they can support efforts to help students claim agency over their own identities as scholars throughs scaffolding information literacy skills embedded in the ACRL Framework; it is through OEP that we may inform our faculty (and students) of the societal benefits of knowledge sharing to help shift the norms of democratizing information access, diversifying the voices present in scholarly literature, and

empowering more individuals around the world to contribute to open scholarship. Helping students fully grasp the benefits to society that emerge when you establish and nurture a culture of knowledge and information sharing through OEP is important (Gumb & Miceli, 2020). As practitioners with knowledge of the severe inequities of information access in our local communities and around the world, we are uniquely positioned to guide and encourage our students towards legally and ethically contributing their scholarship out into the greater society, increasing the information privilege from a few to many. Simultaneously, we feel that educating and supporting faculty about the importance of scaffolding student understanding of the risks and responsibilities associated with contributing one's intellectual property to the knowledge commons via open licenses is arguably more critical during this age of constant digital sharing.

At the same time, not only will this work aid in developing students' information literacy skills listed above, there are the pedagogical benefits of engaging students in the classroom beyond the adoption of OER textbooks, which alone is the removal of a barrier to many students who cannot afford traditionally published text. OEP can help shift instructors away from a teacher-centered model of education, giving space for the inclusion of student voices and leading to participatory learning that is more engaging for students (Morris & Stommel, 2014). We also know that simply adopting an OER can engage faculty in the open education community enough that they want to experiment with OEP, but there are significant barriers to adopting OEP as listed above. This program eases some of those barriers, especially in regards to pedagogical knowledge. Adopting a textbook for a teacher-centered classroom is a much easier task than shifting one's entire teaching philosophy to engage with OEP, especially if said faculty member has little pedagogical training. In addition, the inherent openness of OEP enables faculty to see other faculty practitioners engage with their content and their students in new and innovative ways, providing for new ways of thinking about teaching and learning (Paskevicius & Irvine, 2019). Also, this program plans to include some of the pedagogical theories and underpinnings that would aid in a successful implementation of OEP in the classroom.

Putting these practices into action requires partnership between the faculty who teach and librarians who support OEP. It also requires those partners to have a shared understanding of not just established OER skills such as copyright and learning technologies but also critical librarianship and the inclusive, equitable values at the heart of OEP. This project will bring complimentary pools of

knowledge together to offer a better path for individual instructors, library experts, and the institutions where they work.

All materials will be released under an open license and disseminated through OEN's Google Group of 700+ users representing hundreds of higher education institutions in the United States and Australia, allowing for immediate transparency, reuse, and adaptation among various groups of stakeholders. They will also be shared with parallel open education development programs such as the Scholarly Communication Notebook (LG-36-19-0021-19), as well as related training on OER and OEP in graduate programs and professional development. Gumb's role as Open Education Fellow for the New England Board of Higher Education and its [National Consortium for Open Educational Resources](#) will provide a national network of sharing amongst the regional compacts' broad state networks. If this planning grant is successful, it also sets the stage for a self-sustaining, annually offered training program that can continue to refine, refresh, and expand the reach of these practices, hopefully supported by a full Project Grant.

This project gathers a robust set of resources to guide open educational practice and pilots a model for training for librarians and faculty to understand their unique collaborative strengths in order to prepare and support OEP in this moment of crisis. It also builds a sustainable model for values-led open education going forward. Lessons from this project will inform practice in an emergent area of open education and offer a counterweight to both exclusionary traditional commercial textbooks and inequitable digital-only, surveillance-based solutions.

Tasks (Start August 1, 2021)	August	September	October	November	December	January	February	March	April	May	June	July	Phases
Hire graduate student and onboarding	█	█											Depen and diversify models for OEP
Interviews and snowball outreach	█	█	█	█	█	█	█	█	█	█	█	█	Build consensus and community around a more equitable approach to OEP
Curriculum Development Symposium for Fellowship development team (inc. PIs)		█	█										Pilot training in OEP within a social justice framwork
Curriculum development work		█	█	█	█	█							
Call for proposals for pilot training				█	█	█							
Fellowship: online course							█	█	█	█			
Fellowship: Project Development Symposium for participants (at OENSI?)											█	█	
Fellowship: Implementing projects												█	

Tasks (Start August 1, 2022)	August	September	October	November	December	January	February	March	April	May	June	July	Phases
Interviews and snowball outreach	░	░	░	░	░	░	░	░	░				Depen and diversify models for OEP
Fellowship: Implementing projects	█	█	█	█	█								Build consensus and community around a more equitable approach to OEP
Assessment of Fellowship program						░	░	░	░				Pilot training in OEP within a social justice framework
Fellowship: Next Steps Symposium for team + Fellows + OEN							█	█	█				
Explore ongoing and sustainable training										▓	▓	▓	
Dissemination through professional venues	░	░	░	░	░	░	░	░	░	░	░	░	

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.

Copyright will remain with the creator(s). All materials will be released with an open CC-BY or CC0 license to reflect our commitment to openness and maximize the reach and impact of this project.

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.

All rights and conditions will be defined by the CC licenses we will apply.

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.

All research will be conducted using professional best practices and reviewed and, where appropriate, managed by our Institutional Review Board. We will include the possibility of submitting contributions anonymously for any contributor who desires to select that choice out of concern for privacy (or any other reason). Creative Commons already includes the right to waive attribution, so that right will be

extended to contribution metadata.

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.

Research will generate quantitative and qualitative data sets as well as presentations and scholarly publications. Training materials will include slide decks and recorded presentations as well as related ancillary materials such as handouts and worksheets.

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.

We will develop content with standard word processing and design tools such as google docs and Microsoft Word and then share them openly on the web using non-proprietary formats. Other contributors will be free to select the appropriate tools, software, and supplies as long as the final version that is shared is openly accessible.

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.

Standard textual materials will be shared using HTML, Markdown, PDF, and similar open and non-proprietary formats. Multimedia materials will also be shared openly using formats such as FLAC or SVG, as appropriate.

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 workflow as outlined in our schedule of completion. Our timeline for meeting planned tasks will help us monitor and evaluate our progress. Workflow and procedures will be conducted using professional best practices and reviewed and, where appropriate, managed by our Institutional Review Board and Office of Information Technology as well as project leads.

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).

All materials will be hosted on the project site as well as in appropriate OER repositories. Publications and data sets will be hosted in relevant institutional and disciplinary repositories.

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).

Where appropriate, we will we will provide metadata and generate documentation that conforms with Data Documentation Initiative (DDI).

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

Metadata will be linked to any data sets we develop and both will be openly shared in appropriate repositories.

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).

We will rely on metadata used by established platforms in the OER community such as the Open Textbook Network and OERCommons

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).

We will rely on the outreach built into the proposal as well as engagement with the

OER community and disciplinary communities through conferences and scholarly articles. The Fellowship materials will be shared openly in similar fashion to the OER Certificate materials.

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://canvas.umn.edu/courses/178527

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.

We will not be developing any software.

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

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:

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.

Our research will gather qualitative and quantitative data on faculty use and student experience with open educational practices. These will primarily include interviews, surveys, and focus group discussions. In addition, we will gather feedback from developers and participants in the Fellowship program gathered through webforms, course evaluations and similar direct communication.

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?

Where appropriate we will do all assessment work in consultation with our institutional review boards.

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.

The project will employ thorough procedures to minimize any risk and protect the participants' confidentiality and anonymity where necessary. Publications about the findings from the study will mask the identity of all participants. Interviews may be digitally recorded; transcripts will be prepared with names and any other personal identifiers anonymized to protect participants. Any survey data will similarly be anonymized.

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

Datasets will be openly shared in nonproprietary formats after appropriate steps are taken to protect any PII.

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?

Any documentation for surveys or assessment materials will be linked to the relevant data sets and stored with the PIs during the project. Once they are

anonymized and ready to be shared they will be shared openly.

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

Any datasets will be stored in an open repository such as the LIS Scholarship Archive (https://osf.io/preprints/lissa/discover) or Humanities Commons CORE platform (https://hcommons.org/core/).

A.7 Identify where you will deposit the data:

Name of repository: **LIS Scholarship Archive**

URL: **https://osf.io/preprints/lissa/discover**

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

We will review this plan at regular intervals throughout the project, particularly as we begin and conduct evaluation and assessment activities.