Institute for the Study of Knowledge Management in Education - NLG-L 2020

Project Title: Building OER Curriculum-Alignment Networks Across States and Higher Education Libraries

Summary: ISKME requests \$500,000 of IMLS funds, with \$500,000 as cost share, to support the proposed three-year National Digital Infrastructures and Initiatives Project, *Building OER Curriculum-Alignment Networks Across States and Higher Education Libraries.* This **pilot phase project** will develop, pilot test, and release a beta version of a network platform where libraries can share their Open Educational Resources (OER) alongside local evaluation and course alignment data for each resource, so that faculty across library systems can access these data as they search for resources and plan their courses. The project will meet a national need for the discovery of relevant, course-aligned OER across states and institutions, and in support of equitable and affordable curriculum, including no cost/low cost textbooks, for all learners. ISKME will collaborate with library consortia in four states as pilot partners—Louisiana Library Network (LOUIS), Virtual Library of Virginia (VIVA), OhioLINK Libraries, and Texas Digital Library—together impacting over 2M students. With co-design input from their faculty and library staff end users, as well as from additional library consortia enlisted as thought partners, the project will result in a scalable platform that enables the automated alignment of educational content—across multiple OER repositories—to campus specific standards and to the local teaching and learning requirements of individual faculty and their courses.

Statement of National Need: ISKME's OER work over the last decade, including our IMLS funded initiatives, has revealed that a principal barrier to OER use by educators is the difficulty in finding the resources that they need. While existing OER platforms, including the Open Textbook Network, Open SUNY, and ISKME's own OER Commons, provide educators access to a wealth of high quality OER, these OER often are not aligned to learning outcomes, or to local course requirements—making the task of identifying relevant OER time consuming and ineffective for the faculty end user or library staff curator.

Over the past two years, ISKME has worked with library-led OER initiatives including VIVA, LOUIS, and OhioLINK to provide OER repositories where faculty and library staff work to align OER to their statewide transfer course matrices. As their work has matured, these consortia have begun to look for ways to collectively leverage each other's alignment work. In doing so, they seek to expand the amount of curriculum-aligned OER that their end users have access to outside of their internal siloes, and to take advantage of extended metadata—such as learning outcome alignment, user reviews, and licensing information—not currently available in traditional library discovery tools.

This project proposes that the recurring time cost of evaluating and aligning OER to local needs would be drastically improved by centralizing and expanding metadata about how resources have been used, and by designing search and discovery user interfaces that surface the most relevant metadata based on a user's local context. And further, by allowing library consortia to maintain their OER collections that are selectively curated and tagged to meet their local needs—while at the same time enabling them to make their curriculum-alignment metadata transparent and searchable by their peer consortia—more resources become discoverable for localization and reuse, and to a much larger audience.

Project Design: Working with four library consortia partners selected for their strong commitment to finding solutions to OER discoverability, the project will design and pilot a shared network platform that aggregates peer reviewed and curriculum-aligned OER from multiple institutional repositories, making it possible for faculty end users to search and discover OER based on these metadata. We will develop API services on top of an interoperable metadata framework that can provide integration points with existing peer review platforms such as the Open Textbook Network, and institutional repository software, such as Dspace, ContentDM, and the IMLS-funded Hyku project.

The approach will entail gathering input from surveys and user experience interviews with faculty and library staff across the four consortia, to assess their decision making processes and metadata requirements when searching for and selecting OER. From analysis of this input, and with support from additional library consortia serving as thought partners on the project,



technical and design requirements for platform architecture and user experience will be finalized. This will be followed by a phase where platform features will be iteratively developed with faculty and library staff end users. The final phase will include a beta pilot and evaluation of the platform with end users, and publication of the outcomes, including technical documentation, an open GitHub repository, and a roadmap detailing development needed to scale beyond the beta release. Future work (post-project) will focus on onboarding additional consortia partners and implementing interoperability enhancements.

National Impact: The project anticipates the following impacts on the teaching and learning community:

- Reduced time for faculty in finding, evaluating, and adapting OER to meet their local course requirements;
- Increased ability of faculty to identify course materials that are engaging and relevant to students, including materials that better meet the needs of traditionally underserved learners;
- Increased efficiency and effectiveness in OER curation for library staff, as they work to build collections and to support faculty and student discovery of course-aligned OER specific to their campuses;
- Increased efficiency and scale at which library consortia and networks of institutions can leverage the curation work of others, both within and outside of their states and systems; and
- Increased knowledge for the field on OER reuse, and on the types of materials that are most amenable to reuse, informed by the analytics and metadata on curriculum-aligned OER within the platform.

Diversity Plan: The project will engage 48 faculty and library staff as research participants at the 331 institutions and the 140 community colleges that are members of the four consortia. By ensuring that at least 50 percent of these research participants are educators from community colleges serving a high percentage of Pell Grant recipients, and that a proportion of them also have experience in meeting accessibility requirements for learners with cognitive and/or physical disabilities, the project will be positioned to incorporate the needs of these communities into its desired outputs.

Budget ISKME requests \$500,000, with 1:1 cost share, over 3 years, for a total project budget of \$1M. Requested funds will cover the following costs: \$200,000 for salaries, wages, and benefits; \$175,000 for technical contractors for development support; \$30,000 for travel to co-design meeting; \$3,000 for meeting supplies/materials; indirect costs of \$40,000. The four co-design partners will receive a total of \$40,000 for stipends for working group and dissemination activities. A total of 48 faculty and library staff participants will receive a combined \$12,000 in stipends for their participation in the project's user research interviews (N=48) and pilot testing (N=24).