Library as Research Lab: Immersive Research Education and Engagement for LIS Students and Library Professionals

This project aligns with IMLS's strategic goal of libraries as community anchors infusing academic libraries with research laboratories to enhance the research skills of professional librarians and master's students. The project runs from October 1, 2017 to September 30, 2020. The University of Michigan Library will serve as the site of the research labs, and University of Michigan School of Information faculty and librarians will co-create research and learning environments in which cohorts of LIS students will engage in a variety of research projects over the course of an academic year. Each lab will consist of seven members: a director, a senior librarian, a junior librarian, and four students. Students will be mentored by faculty, practicing librarians, and peers; junior librarians will be mentored by the faculty and senior librarians. Students will have the opportunity to apply what they learn from coursework in such areas as project management, contextual inquiry, research methods, and statistical analysis to library practices. The three research labs will be: Library Assessment in Student Learning, Library Assessment for Research and Scholarship, and Designing Thinking for Services.

The importance of gaining practical experience as a co-curricular program has long been recognized in LIS education. Through internships, practicums, or field experiences, LIS students are expected to perform a range of tasks in library work settings. However, programs tend to focus on traditional library functions and do not often provide the opportunity to engage in the kinds of professional practice that would support the new set of competencies and capabilities that LIS graduates need in order to succeed in the workforce. Likewise, new library practitioners have not had the opportunity to engage in research or evidence-based practice. Academic librarians are increasingly expected to use evidence to justify the status of the library as a community anchor contributing to the overall teaching, research, and service missions of the university. As a result, recent LIS graduates and current librarians alike must develop the research skills needed to demonstrate the library's value by using evidence and to build an argument when proposing new and novel programs and services.

Over the three years of project, 30 students and six librarians will participate in the program. Students will submit their applications, and lab directors and librarians will make selections, assigning students to one of the three research labs. At the beginning of each year of the program, librarians will attend a half-day mentoring workshop. Based on the materials developed for the workshop, discussions, and ideas generated during the mentoring workshop, lab directors will revise the program's published *Mentoring Handbook* and make it publicly accessible. The members of each lab will meet bi-weekly to share research ideas, work on research design, analyze data, implement solutions, and report results. The entire cohort of students, librarians, and lab directors will participate in monthly research seminars to learn responsible conduct of research and scholarship, including the topics such as research integrity, ethics, IRB (Institutional Review Board) application procedures, academic writing, grant writing, data management, poster presentation, and publication venues. Students will benefit from peer-to-peer mentoring, and librarians will benefit from sharing mentoring experiences in the monthly research seminar. At the end of each year participants will present their research projects in an annual research symposium, which will be open to the University of Michigan community. Students and librarians will be expected to present their projects in professional conferences or to publish in professional journals.

The success of the project will be evaluated in terms of process and outcomes. The process-based evaluation will assess how well project activities are being implemented based on the data collected from observation of events, document review, pre- and post- program questionnaires, and exit interviews. These will be used to inform future iterations of the project as well as the end products, such as the mentoring handbook. The outcome-based evaluation will assess learning outcomes for students and professional-development outcomes for librarians. Pre- and post-program questionnaires, individual exit interviews, and focus-group interviews will be collected and analyzed to assess the self-confidence, research skills, and critical-thinking skills of the students and the mentoring skills, research skills, and professional identity of the librarians.

The impact that the proposed project will make to the LIS field include: (1) the creation of a replicable *Library as Research Lab* model; (2) building research skills and professional capabilities in the academic library workforce; (3) fostering and enhancing mentoring capabilities in the profession. Ultimately, LIS educators, LIS students, and academic librarians who are seeking alternative practical experience programs will be beneficiaries of the proposed project because they will be able to replicate and adapt our research lab model.