University of Illinois at Urbana-Champaign

Prioritizing Privacy: Training to Improve Practice in Library Analytics Projects

1. Proposal Summary. The University of Illinois at Urbana-Champaign, in partnership with Indiana University-Indianapolis (IUPUI), requests $213,727 for *Prioritizing Privacy: Training to Improve Practice in Learning Analytics Projects*. *Prioritizing Privacy* is a three-year continuing education program that will train academic library practitioners to comprehensively address the privacy implications of learning analytics projects. The training program will guide participants through materials related to learning analytics, privacy theory, privacy-by-design principles, and research ethics and then present participants with case studies. The case studies will explore the contours of ethical reasoning and decision-making, particularly with respect to challenges associated with the higher education accountability movement. Participants will finish training by strategically developing a plan for a learning analytics project prioritizing privacy protections. The primary deliverables of *Prioritizing Privacy* are: (1) face-to-face training for an estimated 100 participants; (2) online training for an estimated 100 participants; (3) an open educational resource packet consisting of the training curriculum, guidelines for facilitating the training, and recommendations for incorporating the materials into other training programs and library science courses; and (4) at least one peer-reviewed research publication.

2. Statement of Broad Need. Higher education institutions (HEIs) are facing significant accountability pressures to prove that their efforts produce valuable results and their resource expenditures are justifiable [1]. One result is that institutional administrators, and the stakeholders to whom they report, want quantifiable data to drive analytic solutions. In addition to traditional business intelligence strategies, HEIs have adopted learning analytics (LA) methods and technologies to home in on learning [2]. LA is defined as the "measurement, collection, analysis, and reporting of [student and other data] for the purposes of understanding and optimizing learning and the environments in which it occurs" [3]. LA have helped institutions optimize advising, predict student retention, and increase student engagement. Feeling the same pressures as their administrators, academic libraries have begun to participate in LA practices [4]. LA extends library assessment and evaluation practices and may further demonstrate library impact on student learning, faculty productivity, and more [5]. Regardless of the benefits that could accrue, LA unquestionably challenges student privacy, thus straining the professional ethics commitments librarians make to uphold user privacy and intellectual freedom [6,7].

Librarians are aware of and trained in research methods and, to a lesser degree, research ethics; however, LA presents new challenges to existing norms, values, and information policies at the local, state, and federal levels [8]. There is a pressing need to train librarians to handle the particular data ethics issues—especially the privacy issues—*before* pursuing LA. As a Community Catalysts project, the goal of *Prioritizing Privacy* is to strengthen the capacity of academic librarians to integrate privacy theory and principles with LA practice. IMLS-funded projects such as *Assessment in Action* [9] have provided training in impact evaluation methods and generated a wealth of case studies of library impact on student learning and success. Other IMLS-funded projects, such as *Library Values & Privacy in Our National Digital Strategies* [10] and *A National Forum on Web Privacy and Web Analytics* [11], have convened the library community for important discussions of privacy issues related to a range of topics including library analytics, learning analytics, web design, library policy and practice, etc. Lacking, however, has been any training focused on privacy and LA. *Prioritizing Privacy* has its genesis in conversations at the *Library Values & Privacy in Our National Digital Strategies*, which identified the need for continuing education on privacy for academic librarians. The final report of that convening states that: "Participants repeatedly expressed concern that library [professionals] all fell short in terms of receiving proper training and education around issues of patron privacy [, and] literacy gaps persist on issues of privacy." *Prioritizing Privacy* responds to this documented need.

3. Project Design. *Prioritizing Privacy* is a three-year continuing education program that will teach academic library practitioners about privacy issues associated with learning analytics (LA), provide them structured experiences to reflect on ethical issues with care and purpose, and support the development of privacy protections for their LA projects. The project will have three phases.

Year One: Curriculum Design. The team will conduct a needs assessment by scanning the literature and gathering input from library practitioners on privacy issues associated with LA. This will serve as the

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* Underlined numbers in brackets are linked to references and related works when the document is viewed as a PDF.

foundation for the curriculum design and enable the team to strategically apply the expert knowledge of our content partners. Individuals representing intended training participants will work through prototypes of curricular materials to test their effectiveness using a participatory design process. The advisory board, which will consist of individuals with expertise in learning analytics, library assessment, research methods, and privacy, will also review the curriculum. It is anticipated that the curriculum will draw upon the principles of respect for persons, beneficence, and justice, which are the underlying principles of human subjects research review in the United States, as well as principles of privacy, quality service, etc. from the ALA Code of Ethics.

Year Two: Training. Delivery of the curriculum will occur in face-to-face settings at in-person workshops and in an online environment. The team will offer four in-person workshops at relevant library conferences, such as ALA, ACRL, LOEX, or CNI; enrollments per workshop will be capped at 25 participants. Online training will be offered as a structured, multi-week online course using a learning management system. The online course will be offered four times with enrollments of up to 25 participants per course. Summative and formative learning assessments will be built into both in-person and online learning environments in order to evaluate the effectiveness of the training and identify opportunities for improvement, as well as to support peer-reviewed publication. The team will also interview participants to support research efforts.

Year Three: Dissemination and Publication. Distributing the training materials as a digital open educational resource (OER) packet is a key component of the sustainability of the investment in *Prioritizing Privacy.* The packet will include the training curriculum for the workshops and online course, guidelines for facilitating the training, and recommendations for incorporating the materials into other training programs and library science courses, with a CC-BY-NC license. The team will place the OER packet in IDEALS, the institutional repository at Illinois, as well as offering a webinar providing an overview of the packet and how it can be used. During this year, the team will publish a peer-reviewed article developed from the data gathered in Year Two, preferably in a high quality open-access journal.

4. Diversity Plan. Participation by a diverse community of practitioners across all phases of the *Prioritizing Privacy* is critical to the success of the project, particularly as underrepresented and marginalized individuals are at greater risk of harm when privacy is not prioritized in library assessment and impact evaluation projects. To help ensure diverse representation in the curriculum development phase, strategies developed by the University Library at Illinois to recruit a diverse workforce will be adapted to solicit participation in the participatory instructional design process, including targeting specific listservs and discussion groups as well as inviting specific individuals. The training materials themselves will be reviewed using culturally responsive pedagogy checklists disseminated at INDABA: Conquering Racism [12].

5. Broad Impact. As a result of *Prioritizing Privacy*, academic library practitioners will be better prepared to consider fully the privacy implications of library analytics projects and to improve the design of such projects in order to strengthen personal data protection practices. Up to 200 librarians will receive training, and an unknowable number of library professionals will benefit from the packet of curriculum materials.

6. Project Team. *Prioritizing Privacy* personnel are well positioned to ensure success of this project. Principal Investigator Lisa Hinchliffe served on NISO's Privacy Principles working group, established the Value of Academic Libraries Initiative during her 2010 ACRL Presidency, co-lead the design for and facilitated ACRL's *Assessment in Action* program, and was co-principal investigator for *CARLI Counts: Analytics and Advocacy for Service Development* funded in part by IMLS. Co-Principal Investigator Kyle Jones is a leading researcher in privacy and learning analytics, with particular expertise in ethical systems and decision-making processes [13]; he is the PI on the IMLS-funded project *Data Doubles* [14] and co-author of the recent ARL SPEC Kit on learning analytics and privacy [15].

7. Budget. Total anticipated costs are $213,727. Breakdown of how funds would be allocated is 1) Salaries and Wages: $34,391; 2) Fringe Benefits: $7,024; 3) Travel : $29,000; 4) Supplies, Materials, and Equipment: $2,000; 5) Contracts and Subawards: $103,851; 6) Student Support: $0; 7) Other Costs: $0; 8) Total Direct Costs: $176,266; 9) Indirect Costs: $37,461; 10) Total Project Costs: $213,727

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