

**Connecting Libraries and Learning Analytics for Student Success (CLLASS)**

Syracuse University requests \$50,000 and will provide an additional \$12,889 in costshare to perform preliminary planning activities to pioneer the integration of library data in institutional learning analytics and develop detailed proofs of concept and models to guide academic libraries preparing to engage in this emerging and important use of data to support student success.

**National Need** – Because the foremost purpose of higher education is to educate students, academic librarians have addressed the challenge of learning assessment for many years. Early on, librarians used surveys to gauge students' satisfaction, confidence, and self-efficacy. More than a decade ago, librarians invested heavily in a variety of homegrown, vendor-supplied, and IMLS-funded information literacy tests. In the last ten years, many librarians have embraced the use of rubrics to assess artifacts of students' information literacy learning, due in large part to the IMLS-funded RAILS project. Since the 2010 publication of the ACRL *Value of Academic Libraries* report and subsequent IMLS-funded library value studies, library research correlating student library interactions with student learning surrogates has proliferated. Now, as institutions of higher education commence and commit to learning analytics initiatives, it is time for librarians to embrace the opportunity to engage with institutional learning analytics tools, systems, and strategies as well. In recognition of this need, IMLS funded the Library Integration into Institutional Learning Analytics (LIILA) project to explore ideas and develop use cases to guide library involvement in higher education learning analytics and student success efforts. To take the next step in using library data to help students learn and succeed, librarians need to investigate feasibility, secure partnerships, compose work plans, and map out prototypes that enable librarians to leverage library data in learning analytics contexts in ways that are practical, scalable, actionable, and ethical.

Learning analytics is “the measurement, collection, analysis, and reporting of data about learners and their contexts, for the purposes of understanding and optimizing learning and the environments in which it occurs” (Conole, Gasevic, Long, & Siemens, 2011, para. 3). Essentially, learning analytics employ data to improve learning contexts and help learners succeed. Learning analytics help educators discover, diagnose, and predict challenges to learning and success and point the way to successful interventions that benefit all students, but especially those who are less familiar with the unwritten rules of higher education, including first-generation students, community college students, students of diverse backgrounds, students with disabilities, and veterans.

While academic librarians have increasingly monitored student success issues in higher education and engaged in the use of library data to study student success, they have not contributed library data to institutional learning analytics initiatives. In order to facilitate learning, improve assessment, partner with other educational organizations, and become contributing and valued partners in the lives of their institutions, librarians must embrace the ethical and responsible use of learning analytics to improve student success outcomes. In this way, this project answers the IMLS call for academic libraries to become higher education Community Anchors.

**Project Description, Plan, & Design** – The goal of this planning project is to analyze feasibility, solidify partnerships, develop work plans, and design prototypes in order to develop proofs of concept and models that can guide academic libraries seeking to support student learning and success by connecting library data with institutional learning analytics. The project will be enacted by participants in three task teams working together at two face-to-face meetings; progress and documentation will be shared with the academic library and higher education community via rapid informal means, a formal white paper, and conference presentation proposals.

Project outcomes are 1) to cement sustaining partnerships and collaborations among academic librarians and learning analytics lynchpins, including institutional information technology and library systems professionals as well as library and higher education technology vendor communities; 2) to design three library prototypes that serve as proofs of concepts and models for future projects connecting library data with institutional learning analytics; 3) as a part of prototype planning, to develop library data profiles for the Caliper standard, enabling the integration of library data with institutional data repositories; and 4) to recommend ways in which drafted prototypes can enable the use of library data to expand library support for student learning and success in ways that are achievable, scalable, actionable, and ethical.

Three phases comprise this project's activities. 1) Preparatory task team work and the first meeting will focus on inceptive planning efforts of three tasks including feasibility studies, finalization of necessary partnerships, and beginning work plan drafts using a modified lean canvas approach. 2) The second meeting will center on developing and finishing the specifications and finalizing prototype plans. 3) Findings and conclusions from the meetings will be disseminated informally at the close of each meeting, in a formal white paper, and via follow-up conference presentations. The full-day facilitated work meetings will be held in the winter and spring of 2019 at OCLC Headquarters meeting space in Dublin, Ohio, a central location for task team participants. Meetings will be facilitated by Dr. Oakleaf, the national advisory group (see below), task team participants (see below), and a representative from IMS Global. Any additional participant invitations will be based on potential contributions and a desire to cultivate a diversity of experiences, perspectives, and institution types. **Task 1:** To investigate the impact on library resource use on student learning and success, task team members from the University of Minnesota (Shane Nackerud, Jan Fransen), OCLC (Don Hamparian, Jill Dukarich, and an IT developer), and IMS Global (Anthony Whyte) will plan to enable EZproxy data to a) be used to identify student library use across a variety of vendor platforms and resource types and b) comply with interoperability standards that integrate library resource use data with larger data repositories and learning analytics systems on a near-real time basis. Access to this granular level of student library use data could enable improvements to library service provision, collections decisions, and up-to-the-minute advising and teaching interventions for students in need. **Task 2:** To investigate the impact of library service use on student learning and success, task team members from Lewis and Clark Community College (Dennis Krieb) and the IMS Global (Anthony White) will plan a prototype to enable library swipe card data to a) be used to identify student library use of library services such as reference and instruction and b) comply with interoperability standards that integrate library service use data with larger data repositories and learning analytics systems to inform library service improvements as well as faculty and advisor support for student learning and success. **Task 3:** To investigate how a library data pool may be used to visualize the use of library resources and services and to augment institutional learner data repositories, task team members from the University of Michigan (Maurice York, Ken Varnum, Sebastien Korner) and Unizin (Etienne Pelaprat) will develop plans for a prototype library data pool to a) capture library data as it is generated, b) extract salient data elements, and c) send those data elements using serialized data streams via API to institutional data repositories for use in near-real time student support.

**Impact** – By jumpstarting academic library involvement in institutional learning analytics initiatives and initiating the integration of library data into learning analytics systems, this project will facilitate student learning and contribute to the development and assessment of higher education curricular and instructional improvements. It will also advance the role of libraries as anchors within their higher education communities that provide indispensable data and contribute to a complete picture of institutional student learning.

**Project Team and Advisors** – The project will be conducted by a team with complementary areas of expertise. Dr. Megan Oakleaf (PI) has researched and advocated for academic library assessment and learner support through the IMLS-funded RAILS and LILA grants and extensive work with the academic library value agenda. A national advisory group includes: Malcolm Brown, Director of EDUCAUSE Learning Initiative; Rob Abel, CEO of IMS Global Learning Consortium; Andrew K. Pace, Executive Director, Community Development at OCLC; Joan Lippincott, Associate Executive Director of the Coalition of Networked Information; Jenn Stringer, Chief Academic Technology Officer and Assistant Vice Chancellor, Teaching and Learning at UC Berkeley; Scott Walter, University Librarian at DePaul University; Shane Nackerud, Technology Lead for Libraries Initiatives at the University of Minnesota; and Mary Ellen Davis, Executive Director of ACRL.

**Budget** – The bulk of the \$50,000 will support team members to attend two meetings (\$14,940). The budget also includes \$19,943 summer salary and fringe for Dr. Oakleaf, who will oversee the project, \$2,800 for meeting costs, \$2000 to help cover publication costs, and \$10,317 in indirect costs. An additional \$12,889 will be costshared.

Conole, G., Gasevic, D., Long, P., & Siemens, G. (2011, October). Message from the LAK 2011 general & program chairs. *Proceedings of the 1st International Conference on Learning Analytics and Knowledge, LAK 2011*, Banff, AB, Canada.