Student Privacy in the Datafied Classroom: Identifying Instructional Student Privacy Practices to Facilitate Librarian/Faculty Conversations

1. Introduction. The University at Buffalo and Indiana University-Indianapolis (IUPUI) request \$246,419 to conduct a three-year research project investigating faculty perspectives of student privacy and their practices in relation to emerging learning analytics (LA) tools and initiatives. While student privacy research exists in this area, there is no substantive research focused on faculty and faculty/librarian collaboration is not emphasized. With this gap in mind, the research team will gather survey and interview-based data from library and information science (LIS) faculty participants. Deliverables include instructional materials to help facilitate conversations between academic librarians and faculty about student privacy issues, as well as webinars and peer-reviewed publications and presentations—all of which will make the findings useful for practice.

2. Statement of National Need. Higher education institutions (HEIs) are connecting the nodes in their digital infrastructures to open up student data flows [1].* "Every click, every Tweet or Facebook status update, every social interaction, and every page read online" leaves a digital trail of student behaviors available for aggregation and analysis [2,3]. In addition to personalizing educational experiences and resources, student data-driven infrastructures can potentially surface cost-saving processes and improve fiscal administration—both of which are goals HEIs target to decrease accountability pressures [4]. Advocates of data-driven education and HEI administrators position this emerging work under the term "learning analytics (LA)." 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" [5]. However, not unlike businesses deploying data mining practices, LA must mitigate very real privacy issues [6, 7]. Students may assume that institutions have their best interests at heart and would not exploit them, but that may not be the case [8]. In most cases, students are neither informed nor asked to give consent to participate in LA [9], because HEIs have few legal obligations under federal law (e.g., FERPA, human subjects research) [10]. Since students are uninformed, LA's opacity raises related questions about student autonomy and institutional power [11,12,13].

This question takes shape: what are HEIs doing about the problems? Some model policy has emerged [14]; codes of ethics have been discussed [15,16]; and professional groups, like advisors and academic librarians, are considering their roles in protecting students [17,18]. But what role do faculty play in protecting and advocating for student privacy? This is unknown. The literature on faculty and LA generally focuses on use practices [19] and feature preferences [20]. One article suggests that instructors are uneasy about access to some LA data and visualizations, fearing that such access would bias their instruction [21]. The research team recently conducted a study of over 7,000 LIS syllabi published since 2010 for student privacy language; only 33% of syllabi included some form of student privacy language discussing policies, rights, and instructions for protecting one's privacy [22]. The lack of literature and the findings in our study signal that faculty may neither be aware of the emerging student privacy problems, nor able to address them in their instruction.

3. Research Questions. The student privacy issues learning analytics (LA) create are significant, and faculty are arguably on the frontline of student privacy. Their tool choices, instructional designs, and course policies impact the degree to which students retain privacy. Consequently, we need answers to the following questions motivating this project:

- How aware are faculty of LA and what are their perceptions of LA?
- How do faculty address student privacy in their courses, especially in relation to LA?

4. Project Design. The team will primarily study LIS faculty because they teach in face-to-face, online, and hybrid environments; they also teach undergraduate and graduate students. Moreover, starting with LIS is logical because of our discipline's interest and expertise in ethical issues related to information technology. *Year 1 - Survey Phase:* The research team will create a survey using a participatory design strategy inclusive of faculty and librarian questions and perspectives. The survey will target full-time faculty from all 61 LIS

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

programs in the United States, Canada, and Puerto Rico accredited by the American Library Association (ALA). The team will also survey non-LIS faculty for comparison, especially in the STEM disciplines. *Year 2 – Interview Phase:* Building on the results from the Survey Phase, the research team will conduct interviews with 40 LIS faculty. Data analysis will identify faculty perceptions of and approaches to student privacy, as well as help the team to identify opportunities for librarians to suggest technology solutions, close knowledge gaps, and assist with ethical decision-making.

Year 3 – Dissemination Phase: The findings will inform the development of instructional materials for use by librarians in conjunction with faculty. The team will develop a "Learning Analytics and Student Privacy Brief." The Brief will contain a summary of the issues, curated resources, and a set of talking points and key questions to facilitate conversations between librarians and faculty. As part of the brief, the team will develop print and HTML-based artifacts, with the HTML-artifacts being easily importable into content (e.g., WordPress), learning management (e.g., Canvas), and tutorial systems (e.g., LibGuides). In addition, the team will develop peer-reviewed scholarship to present at practitioner and scholarly conferences (such as ACRL and ALA) and to publish in high-quality, open-access journals when possible (such as *College & Research Libraries*). Finally, the team will partner with educational organizations (such as ALISE, EDUCAUSE, Online Learning Consortium, or Quality Matters) to disseminate findings and recommendations to a wide audience.

5. National Impact. Identifying and articulating faculty knowledge and behaviors about student privacy will impact decision-making and campus policy development. Deliverables will also impact how librarians discuss student privacy with faculty and peers across campus, enabling them to enhance their role as privacy advocates and leaders. Instructional materials (licensed as CC by attribution), links to webinars, and papers and presentations will be maintained on a website hosted by UB to facilitate sustained access to results of the project.

6. Project Team. The PI is Amy VanScoy, Associate Professor at the University at Buffalo. The Co-PI is Kyle Jones, Assistant Professor at Indiana University-Indianapolis (IUPUI). VanScoy publishes on innovative roles for librarians, faculty perspectives, and student privacy in venues such as *College and Research Libraries* and the ASIS&T annual meeting. Jones publishes on student privacy, autonomy, paternalism, and learning analytics in publications such as *The Information Society* and *College and Research Libraries*; he is the PI on student privacy-focused IMLS grant LG-96-18-0044-18 [23] and has recently co-authored the ARL SPEC Kit on learning analytics [24]. The team is supported by the following advisors with expertise in learning analytics, ethics, and instruction: John Budd, Professor Emeritus, School of Information Science & Learning Technologies, University of Missouri [25]; Christopher Hollister, Interim Scholarly Communication Librarian, University at Buffalo [26]; Willie Miller, Informatics & Journalism Librarian, IUPUI [27]; and Megan Oakleaf, Associate Professor, iSchool, Syracuse University [28].