

Column Title: Strategic Planning and Assessment

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This column focuses on what happens behind the scenes while engaging in strategic planning or assessment, regardless of success or failure. It covers views, strategies, methods, tools, and training related to strategic planning and assessment. The column has two main purposes: first, to share experiences and lessons learned; and second, to provide thought-provoking questions that encourage readers to engage in meaningful discussions on the topic. Interested authors from both within and outside of the library profession are invited to submit their articles to the column editor at jscoul2@uic.edu.

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Title: Insights and Strategies for Assessing Student Engagement and Success in Academic Libraries

Abstract: Understanding how students engage with the library and its impact on their learning and success is essential for both student support and the library's accountability to the institution and stakeholders. In this column, a panel of library learning analytics professionals share insights gleaned from learning analytics projects at their respective campuses and practical strategies based on their diverse approaches. The discussion explores how data enhances understanding and improvement of student learning, initial challenges such as privacy concerns, and ways to represent diverse student perspectives in campus discussions. This column also addresses who should be involved in these efforts, how librarians can collaborate effectively, strategies for smaller libraries with limited resources, and how staff can develop the necessary skills for this work. By examining different learning analytics approaches across institutions, libraries can gain valuable insights and tailor strategies to their specific needs and contexts.

Keywords: Learning analytics, ethical consideration, student learning

Introduction

In today's academic landscape, understanding how students are engaging with the library and the relationship of this engagement to their learning and success not only helps us better support students in their learning journeys, but is also critical for ensuring accountability and relevance of the library to the institution and our stakeholders. Student engagement, learning, and success data helps to inform library decision-making and planning by allowing us to understand if we are succeeding or failing to meet the needs of users, where we may be falling short of our aims, who is not engaging with us, and how to improve. While improvement of student experiences and learning as it intersects with library engagement is the main driver of library value and analytics work, librarians often need to work with and around bureaucratic structures. The "stuff" of student library engagement--library services, collections, spaces, and engagement with library workers--all exist within organizational structures and strictures. In order to engage with students, librarians must demonstrate good stewardship of existing resources and advocate for increased resources through demonstration of impact. In other words, librarians must be able demonstrate that resources allocated to the library make a difference for student learning and development, achievement of student goals, and overall student success.

All of this has been true for decades or even longer. Improving student experiences and learning stands at the core of academic librarianship. We engage with students through the services, resources, and spaces we provide. For librarians to continuously improve student library engagement, we must seek to determine *which* services, resources, and spaces make the greatest impact for students. The work of determining degree of impact enables librarians to advocate to match library offerings with student needs. More recently, librarians have joined other higher education professionals in recognizing that we should not consider "students" as a single entity. In seeking to understand student library engagement, we should resist approaches that fail to reveal a diversity of student experiences. Averages obscure important voices,

and greater awareness of how library participation is (or is not) supporting various groups of students in achieving their goals is essential to the work of improving student experiences, learning, and success.

Panelists

The panelists included in this column led projects at their respective campus libraries that applied learning analytics concepts to understand the intersections between library services, resources, or spaces and a diversity of student groups. Their projects differ significantly in design, approach, and focus, demonstrating that there is no one path to learning more about what various student groups need, want, and benefit from when it comes to library engagement.

Dr. Megan Oakleaf is a frequent collaborator with the panelists in this discussion. Her role in this discussion is to situate and coalesce panelists' responses within the context of ongoing academic library assessment trends. Megan is Professor of Library Science, LIS Program Director, and Associate Dean for Academic Affairs in the School of Information Studies at Syracuse University. Her research seeks to assist librarians in using assessment to listen to students and other library stakeholders in order to engage in continuous improvement of library services, resources, and spaces.

Dr. Jung Mi Scoulas is Associate Professor and Assessment Coordinator at the University of Illinois Chicago (UIC), an R1 classified public research university serving more than 34,000 students. It is designated as a Minority-Serving Institution (MSI), a Hispanic-Serving Institution (HSI) and an Asian American and Native American Pacific Islander-Serving Institution (AANAPISI) (University of Illinois Chicago, n.d.). Jung Mi's research explores how students' library experiences and sense of belonging impacts their academic success through various assessment methods. As a Principal Investigator (PI), she has led multiple consecutive Institute of Museum and Library Services (IMLS) grants to develop assessment tools to explore student campus engagement including library use and to offer a series of workshops for academic libraries.

Dr. Rebecca (Becky) Croxton is currently the Assessment and Research Analyst at Colorado State University Libraries. Before that, she served as Professor and Head of Strategic Analytics and Special Projects at the University of North Carolina at Charlotte's (UNC Charlotte) J. Murrey Atkins Library, which is the focus of her remarks in this column. UNC Charlotte is a large, urban public research university serving more than 30,000 students. The university is projected to achieve Carnegie R1 research status in early 2025. Becky has focused her work on identifying student engagement pathways for disaggregated groups of students that libraries and universities can emphasize that significantly increase students' odds for success in terms of year to year retention, 4- and 6-year graduation rates, and cumulative Grade Point Average (GPA).

Shane Nackerud is the Director of the Affordable Learning and Open Education department at the University of Minnesota - Twin Cities Libraries (UMN-TC). The UMN-TC is an R1 designated, public university with approximately 51,000 students and 4,000 faculty across 17 colleges and schools. Shane's work focuses on integrating library materials and Open Educational Resources (OER) into course curriculum, and analyzing the impact of library use on student success.

Ken Varnum is Senior Program Manager and Discovery Strategist at the University of Michigan Library (U-M). U-M is an R1 designated, public university with approximately 52,000 students across 19 schools and colleges. Ken's work focuses on the library's discovery and analytics infrastructure to better understand usage and impact of library resources.

Panel Discussion

In order to find commonalities across the range of approaches, panelists address the following questions, posed by the moderator:

1. **Student Learning:** Why is data essential for understanding and improving student learning?
2. **Starting the Conversation:** What are the initial challenges in having a conversation about library participation in learning analytics, such as handling privacy concerns among librarians?
3. **Including Student Voices:** How can we represent diverse student groups and leverage their perspectives in campus discussions?
4. **Partnerships:** Who should be involved in decision making and implementation of analytics projects in libraries, and how can librarians collaborate effectively across campus?
5. **Getting Started:** What strategies can smaller libraries use to start with limited resources?
6. **Training for You and Your Colleagues:** How can staff build the necessary skills to engage in this work?

Student Learning

Jung Mi: Data provides valuable insights into where students encounter challenges in their learning and highlights opportunities for improvement. Academic libraries, as integral partners within institutions, support student learning in various ways, such as providing spaces for study, making diverse resources accessible, and offering library instruction. By examining data related to how these services are used—for example, identifying the characteristics of student subpopulations (e.g., class level, first generation status, race/ethnicity, etc) who frequently utilize library spaces, instruction, or resources—we can gain a deeper understanding of student needs and tailor our efforts to support their learning more effectively.

At the University of Illinois Chicago (UIC) University Library, I served as the Principal Investigator of a research project funded by the Institute of Museum and Library Services (IMLS) which aimed to develop an assessment tool that examines students' academic engagement, psychological factors, definitions of academic success, and reasons for using the library building and website (Institute of Museum and Library Services, 2022). Findings from this research at UIC revealed many key significant and noteworthy differences among student populations with respect to how and why students use the library. For example, when disaggregating the data regarding the primary users of the library building based on class level, freshmen and sophomores (83%) were the most frequent users of the library. When library building use was compared based on college affiliation, engineering and applied health sciences students visiting most often (Scoulas, De Groote, Shotick, & Osorio, 2024a). Further, first-generation students were more likely to visit compared to non-first-generation students, while Hispanic and Asian students had the highest weekly library use. In contrast, White and Black/African American students reported the least frequent visits. The findings on how students define their academic success revealed both academic achievements, such as earning high grades and excelling in classes, as well as students' ability to manage

their personal growth, including balancing school, life, and other responsibilities (Scoulas, Shotick, De Groote, & Nestor, 2025). The data from this research provided valuable insights into who uses the library and how students use the library, enabling us to better understand and support their engagement and promote their academic success.

Shane: Collecting and using data for assessment purposes is how the rest of our universities and colleges work. There remains some skepticism among many library professionals that anything other than qualitative assessment regarding student use of libraries should be avoided. This puts libraries at a huge disadvantage when it comes to being part of the academic enterprise, from measuring student success to space planning to budget justification. As librarians, we all believe that libraries have a distinct and important role to play in research and student success or we wouldn't work in libraries. We need to match our assessment efforts with those in the rest of the university while still advocating for library values of privacy and security. We have a story to tell and we need data to tell that story. At the University of Minnesota - Twin Cities Libraries (UMN-TC) Libraries we have been able to use data to more effectively demonstrate the association between library use and student success measures such as GPA, retention, and four year graduation rates. For example, in one study we found that using the library at least one time in the first year of enrollment significantly increased the odds that undergraduate students would graduate in four years (Soria, Fransen, & Nackerud, 2017). We have used our data to make decisions concerning collections, outreach, and instruction, as well as to support arguments for increased funding and to demonstrate value. One study that helped with decision making looked at the impact of library instruction on specific groups of students. We found that for groups such as first generation students in our College of Liberal Arts, Black male students, female Native American students in Liberal Arts, and international first generation students in science and engineering there are connections between library instruction and positive differences in students' GPA with moderate to high effect sizes. Using this data we have more effectively targeted these groups to offer increased instructional opportunities (Gyendina, Fransen, Tomlinson, Peterson, & Nackerud, 2020).

Ken: In general, I believe that without the ability to connect individual learning and research experiences within the library and broader measures of student success, libraries will struggle to demonstrate their essential role in the campus in a language and with metrics that the rest of the campus uses. At the University of Michigan (U-M) Library, colleagues of mine were able to use student data related to library and campus activities to demonstrate how library instruction supported participants in a pilot project to attract and retain first-generation college students to the University. Ensuring that bibliographic instruction was a component of this cohort's campus onboarding experience had a positive effect on student success metrics.

Becky: Put simply, it is not possible to know if we are succeeding or failing to meet student learning needs and goals without gathering and analyzing data. For example, at the University of North Carolina at Charlotte (UNC Charlotte), research conducted by the library revealed a number of statistically significant findings that indicated that undergraduate students who engaged with the library (e.g., library instruction participation, authentication to library resources, study room reservations) had significantly improved odds for being retained for a second year of study and graduating within four (or six) years (Croxtton & Moore, 2020). Findings from this same research also revealed that large percentages of transfer students, who make up approximately 40% of the undergraduate student population in any given year, had little to

no engagement with the library. In response, the library is now (1) developing new marketing materials targeted to specific departments about the benefits of library instruction, (2) strategizing ways to promote greater engagement with transfer students, and (3) actively sharing findings through reports and presentations with campus leaders including the provost, academic deans, and student affairs colleagues. This sharing with campus leadership has helped to increase awareness about the value of the library, forge many new campus partnerships, and ensure a “seat at the table” in campus-wide discussions about student learning and support.

Starting the Conversation

Shane: Privacy concerns are probably the most important issue a library faces when considering analytics work. The library’s position on privacy usually determines whether or not a library pursues analytics work. Different libraries will also have different needs and comfort levels with the privacy implications of assessment projects. It is critical to have clear goals and research questions that can help guide analytics work. Alignment with university privacy and data security policies is also crucial, as well as making sure library administration understands the project and approves of the work. Your library may also have a specific privacy policy that outlines data gathering and privacy expectations of research projects. And of course, approval from your Institutional Review Board (IRB) may be warranted. In 2013 at the UMN-TC Libraries, we wanted to research how library use impacts student success measures such as GPA and retention, and we knew that would require personally identifiable information. In order to maintain as much user privacy as possible, it was decided to track user IDs without tying the IDs to specific user transactions. For example, when a user logs into a database, their ID and the fact that they logged into a database is captured and retained, but the actual database used or queries executed are not. In other words, user IDs are captured and tied to broad activities, but not to the specific resource or service used. Doing this allowed us to better understand how our students, especially our undergraduate students, use the library and who those students are. Knowing who the students are allowed us to actually tie library use to student success measures and conduct further research on specific groups. Doing this allowed us to better understand how our students, especially our undergraduate students, use the library and who those students are. Knowing who the students are allowed us to actually tie library use to student success measures and conduct further research on specific groups. More recently, we have started to gather data regarding usage of course reserves specifically. For this project we worked with multiple partners, on campus and off, to develop the first student opt-out mechanism at the University. In addition, documentation about our analytics work is made available to students to provide as much transparency as possible.

Ken: Start small, with questions about use and impact of both physical and virtual library resources that are widely seen as important but unanswered. Brainstorm about how the question could be researched using data (ignoring, for the moment, where that data might exist or be generated). And then move to weighing the pros and cons of using/collecting that data to answer the question. It is important to build data collection processes in response to specific questions and needs. It is by focusing data collection and analysis on specific, targeted, and time-bound processes that you can help colleagues understand the benefits and contextualize the potential risks of working with non-anonymous data.

Becky: During the initial planning phase of UNC Charlotte’s library student engagement and success study, many conversations took place within the library in order to come to terms with the level of data we were comfortable using, data privacy concerns, why we wanted to do this work, and how it aligned with our library mission, values, and strategic goals. In fact, the library was an early initiator and helped to pave the way for similar conversions across campus. As part of this process, a library task force was established that created a library patron privacy statement that aligned with campus privacy policies. As a library, we ultimately agreed to pursue student engagement and success research, but would only use existing student engagement data to identify total numbers of engagements per each undergraduate per student engagement type per year; we removed specifics for resources accessed, etc. This pre-work, which took about six months, was critical for establishing buy-in across the library which required creation of new workflows and processes to generate and collect useful data. With this buy-in came an underlying commitment among library leaders to use the findings to guide decision-making and take action. As a library, we wanted to support all students, but had a hunch that we were missing large pockets of students in our reach. At the same time, we were interested in learning which types of library engagements (e.g., instruction, use of authenticated resources, study room reservations) significantly impacted students’ odds for success so that we could tailor our services and marketing approaches accordingly.

Jung Mi: Protecting privacy is a primary concern both within our institution and among librarians. At the UIC University Library, we prioritize safeguarding individual privacy by ensuring that sensitive information—such as details about who checked out materials, visited the library, or attended library instruction sessions—is not accessible. This approach stems from our commitment to privacy and the absence of a clear policy governing the handling of such data in a library context. As a result, the assessment tools I mentioned earlier, which include a one time survey and online weekly journals, serve as alternative ways to capture students' experiences. The tools are designed for academic libraries with practical methods to evaluate and enhance their support for student success within their specific institutional contexts (Scoulas *et al.*, 2024a). However, to use these tools, obtaining IRB approval is required. While the tools rely on students' self-reported data, the first step in addressing privacy concerns is to ensure that students are informed about what data are being collected, how it will be used, and how their privacy will be protected via an informed consent form. At UIC, a key ethical issue was addressed during implementation by ensuring that students were informed that their demographic information and GPA would be linked to their survey responses, but the responses would be deidentified through Qualtrics (Scoulas *et al.*, 2024a). This information was clearly communicated through the consent form, which was included as part of the first survey question when students were invited to participate in the research project via the online platform. These steps enabled us to link students' responses with this data to explore potential relationships. Informing students about this process up front is essential to maintaining transparency and fostering trust.

Including Student Voices

Jung Mi: I recommend involving students in every stage of the assessment process, including design, data collection, analysis, reporting, and communication. When starting a conversation about students’ privacy concerns, I include their voices by asking them: What are your concerns, and what expectations do you have regarding how your information is used by the institution? Explaining the benefits of using

their data can also help gain their trust and support from the beginning. Including students' input during data analysis provides meaningful insights and establishes a feedback loop about actions taken later based on their input. When communicating the results of the assessment, consider including students' insights on how to interpret and approach the findings. While incorporating students' voices at every stage may take additional time, it represents a truly user-centered approach. This method enables administrators to confidently use the information for decision-making and share the findings with students who stand to benefit the most. At the UIC Library, we work closely with the Undergraduate Student Government to identify their priority concerns, incorporating these into the assessment process, sharing the results, and discussing ways to take action based on those results. Including their voices allows us to better understand students' needs, addressing them through data-informed decisions, and fostering a more responsive and supportive relationship.

Ken: Where practical and useful to students, make sure that data you collect from individual student interactions can be shared back to them. For example, if the library is interested in use of online resources within a course context, enable a student-facing dashboard where the materials they interact with are presented. Or if data is collected about use of library spaces, reflect that back as a web page noting how many spaces or rooms are available at the moment. Not all data will lend itself to this sort of interaction, but reflecting the collected data back to the students whose activities generated it can be useful. Additionally, it is important to be proactive about what data that is collected and why. At U-M, the library shares its privacy policy, data collection, and reasons for it at the Safe Computing website (<https://safecomputing.umich.edu/viziblue/library-data>). This is part of a campus site managed by the University's central IT division, which collects similar statements from other campus entities. This statement provides transparency and provides a helpful point of reference when individuals have questions.

Shane: At the very least, libraries should provide documentation and transparency concerning analytics work that includes student data. Students should easily be able to find information about specific projects with clear information about how the project benefits them or the University. Of course, including students in project design and analysis can also be a great way to shape the work and uncover important questions or concerns. At the UMN-TC Libraries we have a Student Advisory Board of 10 students from a variety of backgrounds and majors that has helped us understand better the ideas and concerns of our undergraduates. The Student Advisory Board had some great questions and suggestions for our course reserves project specifically, such as asking for the ability for students to opt-out, that helped us design a better project overall.

Becky: In creating a dataset for analysis of student library engagement and success, it was important to our library to include relevant demographic characteristics such as initial admission status (transfer versus first year), race, Pell eligibility, first generation status, major, college of enrollment, etc. so that we could disaggregate the data in meaningful ways rather than treat our students as a single, monolithic entity. Data disaggregation plays a key role in highlighting different needs, perspectives, and ultimately the voices of different groups. Also of note, the dataset included all undergraduate students so that we could identify demographic groups that were engaging with the library and those with little to no library engagement. We also created interactive dashboards (with access restricted to study partners and senior campus leaders) to allow for deeper exploration using demographic and other grouping variables. Through data

disaggregation, we were able to identify gaps in the library's reach which is being used to guide library decision-making and planning. In addition to uncovering significant and noteworthy differences in library engagement between transfer students and first-time-in-college students, study findings also revealed many other noteworthy differences among demographic groups. For example, the levels and types of engagements between students differed significantly, depending upon their college affiliation. Even more interesting, student engagement levels differed widely across departments within the same colleges. Such findings prompted further investigation, including using qualitative methods to understand why these differences may exist. As a library, we acknowledged that while quantitative data is useful for revealing trends, it does not always tell the whole story. Thus, the library seeks ongoing input from the undergraduate Student Library Advisory Board members, student interviews, focus groups, and survey data to create a more holistic understanding of trends, gaps, and needs before enacting major changes.

Partnerships

Ken: Because many libraries, particularly academic ones, are coming late to the campus learning analytics discussions, we may feel behind the curve in how to connect our data with that from other sources, or how the campus generally provides and protects access to student data. In my case, building partnerships with the team in Michigan's central IT organization, where learning analytics is managed, was an opportunity to both understand the practical ways the campus works with student educational and other data and to bring library values to the discussion. Library employees are far from the only group on a campus interested in or concerned about student success, but because library interactions have been held aside, researchers outside the library may not have a solid understanding of what kinds of learning and teaching activities take place through library-mediated pathways.

Shane: Libraries have an important role to play regarding learning analytics on campus. Not only can we learn from campus partners, but we can also promote library values of privacy, security, and transparency. Sitting on the sideline should not be an option. Most colleges and universities have committees or groups that are already working on assessment and learning analytics. Library employees should try to join these groups to learn more about efforts already underway on campus and begin building connections. At the UMN-TC, I became so involved with learning analytics that I was asked to co-chair a system-wide learning analytics operational group which gave me an opportunity to share our library values and help guide learning analytics practices across the University.

Becky: At UNC Charlotte's Library, the instigation to begin the student engagement and success research came from the Provost's Office and was supported by seed money from an Association of College & Research Libraries Value of Academic Libraries Research Grant in 2018. Before initiating data gathering and analysis, the library spent nearly six months leading conversations with library colleagues and campus associates in the Office of Institutional Research (OIR), Institutional Effectiveness and Analytics, Office of Research Integrity, and leaders of other co-curricular campus units including Student Affairs, Writing Center, Career Center, and the Center for Academic Excellence to conceive of how this work could be carried out, with a heavy focus on setting up processes to ensure student privacy. The planning process with campus partners is described in further detail in Croxton and Moore's article (2020). All partners and study protocols were approved by UNC Charlotte's IRB. As the study continued in subsequent years, the number of study partners grew to just over 20 units and departments.

Partnership with UNC Charlotte’s OIR was critical to the success of this research, as they were responsible for matching the student engagement data with student demographic information and measures of success held in the campus student information system and then deidentifying it before returning to me, the research project’s principal investigator, for analysis.

The many partnerships forged through this work have been instrumental in helping the library “earn a place at the table” in campus conversations about student learning and support. In fact, the work and collaborations from this study helped to inspire a new initiative being led by UNC Charlotte’s OIR and Office of Information Technology, with the library and other campus co-curricular and extra-curricular units as collaborators, to create a campus-wide student engagement data warehouse that will be leveraged by campus partners for ongoing research and assessment.

Jung Mi: When considering partnerships, we should think about who would benefit from the data. For the IMLS-funded project I described earlier, after collecting and analyzing the data, I had the opportunity to present the preliminary findings—highlighting how UIC students perceive their academic success—to campus administrators, including the Chancellor and Provost. This presentation took place during a UIC SparkTalk, an event where UIC researchers are invited to share their research projects (Scoulas, 2024). During the closing remarks after the presentation, the chancellor reaffirmed the institution’s mission of promoting student success by referencing my presentation on the importance of supporting students’ needs. Additionally, several campus leaders emphasized the importance of understanding our students’ needs and expressed interest in future collaboration opportunities. Considering campus leaders as partners is crucial because their leadership and institutional influence are essential for driving strategic initiatives and fostering collaboration across different units. Partnering with faculty and academic advisors is also critical. Faculty can directly shape students’ learning and success through their teaching, whereas academic advisors can guide students in academic requirements and provide personalized support. Within the library, outreach librarians, such as student success librarians, should be included since they are responsible for implementing initiatives that directly support students. At the institutional level, co-curricular programs and units should also be involved as future partners. These groups work closely with students and share the common goal of fostering their success. By collaborating with these units, we can create synergy, addressing students’ needs more effectively, minimizing redundant efforts, and working together to support student success.

Getting Started

Becky: Getting started begins with conversations and an organizational commitment within your library. It is likely that there are already related efforts taking place on your campus that you can tap into. In my work at UNC Charlotte and through consulting with many other libraries, I have come to realize that colleagues in the OIR have the expertise necessary to help you analyze and interpret library student engagement and success data, and are likely to be very interested in collaborating with you! I recommend that you meet with these colleagues, outline your assessment or research questions (e.g., To what degree does student participation in library instruction or consultations impact course grades, retention, etc.?), and then together map out a plan for how to answer your questions. They will likely ask you to gather and

format the data for analysis and can advise or support you in conducting analyses and interpreting findings. Bit by bit, you will gain the skills and confidence to take on this work yourself.

Ken: At the U-M Library, we leveraged the Caliper Library Profile developed under an IMLS-funded project (Oakleaf, 2018) in which Megan was Principal Investigator, and Shane and I participated. Caliper is a specification (Caliper, n.d.) for packaging and storing learning “events” into a data warehouse for future analysis. It was originally developed around concepts such as “attended a lecture,” “watched a video embedded in the learning management system,” “participated in a discussion forum,” etc., and was not designed to capture student interactions with library employees, services, or resources. With the Library Profile, there is now a data vocabulary to describe typical library interactions within this larger data structure.

As a pilot, we built a mechanism to translate the log files from our proxy server—the primary path users who are off-campus use to access library resources as if they were on campus—into Caliper events. For our pilot, we are summarizing use by academic role (faculty, staff, undergraduate student, graduate student) and not keeping any user-specific information. The results are interesting, and show trends about what kinds of users are looking at which of our many journals and databases (from off-campus, anyway). This project connects to partnerships, as well. We worked with our central campus IT department to specify a dashboard that they maintain, in the Looker analytics tool, so that nobody in the library needs access to the breadth of data in the U-M data warehouse.

Shane: At the UMN-TC Libraries we have tried to be very forthcoming with information about the analytics projects we have undertaken through journal articles and conference presentations. We want people to build on these projects, to try to reproduce results, and even criticize when appropriate. And we have been criticized, which is OK because that is how a field moves forward. We also try to provide technical functionality that is developed in our projects to the community. Based on the Caliper Library Profile work already mentioned by Ken, in 2021 we began working on a pilot project to gather student data regarding their usage of course reserves and convert those records into Caliper format. Our goal was to deposit these “caliperized” records into the Unizin Data Platform, which is our university’s learner record store, and potentially make the data available for inclusion in learning analytics projects. At the UMN Libraries we use Ex Libris’s Leganto to deliver course materials to students through the Canvas LMS. This project required partnerships with a variety of organizations and departments including campus IT, Ex Libris, 1EdTech (n.d.) - the maintainers of the Caliper standard, and Unizin. Working with Ex Libris, we successfully developed mechanisms within Leganto to deliver records in Caliper format. This functionality is now built into Leganto and is available to all libraries that use the tool.

Jung Mi: Given the growing demand for assessment to support student success, the UIC University Library developed assessment tools to help academic libraries enhance student learning with support from IMLS (2022). These tools were designed specifically for libraries that lack the capacity or platforms to track students’ experiences across campus. The tools include two distinct surveys:

1. The Student Academic Engagement and Success (SAES) survey, a one-time survey that examines students’ campus engagement, their reasons for using the library, their abilities in various areas (e.g., self-regulation), and their personal definitions of academic success.

2. Online Weekly Journals, which track students' weekly experiences over an 8-week period. These journals expand on the SAES survey by capturing students' self-evaluations of academic success, factors influencing their academic work, and their progress toward graduation goals.

These assessment tools are publicly available free of charge via the project website (<https://libscholar.digital.uic.edu/assessment-tools/>): Student Success Assessment Tools

Building on this work, we secured a second IMLS grant, for which I am the Project Director, aimed at developing a workshop series to help academic libraries nationwide effectively use these tools (IMLS, 2024). Scheduled for Summer 2025, the workshop supports up to 150 academic librarians from 50 libraries across the country. It covers key topics such as an overview of the assessment tools, identifying institutional needs related to student success, adapting the tools to specific contexts, navigating IRB procedures, analyzing data, and writing assessment reports. All the recordings and materials will be available on the project website by Fall 2025. Additionally, five selected academic libraries will receive individualized consultations on implementing the tools from Fall 2025 through Spring 2026. This comprehensive program aims to build capacity in academic libraries, equipping them to better understand and enhance student success.

Training for You and Your Colleagues

Jung Mi: I recommend reflecting on the skills and knowledge you and your colleagues already possess and identifying any gaps. For those new to library assessment, I suggest reviewing the Assessment Proficiencies developed by the Assessment Proficiencies Working Group (Association of Colleges and Research Libraries, 2023). These proficiencies outline the ethics, knowledge, skills, abilities, behaviors, and mindsets needed to engage in library assessment. Rather than focusing on specific tasks or job descriptions, the proficiencies emphasize broad areas to help individuals and organizations identify what is most relevant to their context. They define assessment practitioners as any library employee or stakeholder involved in assessment. By exploring these proficiencies, you can pinpoint areas for growth and improvement. Additionally, the document includes a rich collection of resources in the bibliography, which are valuable for further learning and development. If you are specifically interested in gaining a deeper understanding of data analysis and research design, consider enrolling in courses offered by your institution, such as those on research design or basic educational research statistics. These courses provide a solid overview of the concepts and equip you with essential knowledge and skills needed for library assessment work. If you are interested in implementing the assessment tools at your institution, you can explore the *Student Success Assessment Toolkit* (Scoulas et al., 2024b). Additionally, the Research and Assessment Cycle Toolkit is another valuable resource for library assessment practitioners (Association of Research Libraries, n.d.). This toolkit provides guidance on library assessment processes and includes 23 training videos along with supporting materials to help you understand and apply effective assessment practices.

Ken: Establishing an “assessment special interest group” within your library to bring together individuals who routinely do assessment can help bootstrap the learning process. Most of us routinely think about and conduct assessment within our own areas of work. At U-M, we have monthly meetings where a library employee presents a study they conducted, their findings, and a discussion of both the implications of the

findings and the assessment process itself. It's a great way, with little administrative overhead needed, to learn different approaches and benefit from the lessons learned by colleagues.

Shane: Literature and documentation reviews, internal assessment groups, workshops, and regular brown bag sessions are all great ideas. Because of all our analytics work, at the UMN Libraries we also developed “privacy principles” that would guide library work in this area. This created an opportunity to educate staff on the types of projects already underway, and the privacy implications of those projects. It also helped outline the overall comfort level of our library system regarding learning analytics work.

Becky: In addition to the recommendations outlined by Jung Mi, Ken, and Shane, you might consider offering workshops, brown bag sessions, etc. for your library colleagues to help them understand how to interpret student library engagement findings so that they can apply them to their own practice. Oftentimes, there are individuals throughout the library who may be interested in learning how to do this type of work themselves and will be grateful for opportunities to collaborate with you to develop their own skills through hands-on practice.

Conclusion

These four panelists and the projects they have undertaken represent a wide range of approaches to learning analytics. They offer a number of valuable insights for academic librarians seeking to better understand their students and inform library decision-making and action-taking to support them in their endeavors. Key themes include:

- Using data to understand student learning broadly and investigating disaggregation as an approach for gaining nuanced awareness of various student groups, especially those that have been traditionally overlooked in assessments that prioritize averages over representing a diversity of voices.
- Exploring connections between library engagement and a variety of indicators of positive student outcomes, including student experience, learning, and success.
- Using evidence gained through assessment and analytics work to uphold our professional responsibilities to interrogate and reflect upon our practices in pursuit of continuous improvement for, with, and on behalf of students.
- Translating new understandings into action by informing decisions made, actions taken, and improvements offered by libraries for, with, and on behalf of students.
- Recognizing that engaging in this work enables libraries and librarians to take their place among many colleagues across our organizations that are engaged in exploring new and better strategies for supporting students.
- Seeking the answers to important questions, purposefully and carefully, following assessment and research best practices throughout a project cycle.
- Engaging deeply with privacy principles to ensure that we apply ethical practices as we seek to gain understanding of our users, recognizing that seeking that greater understanding is also an essential ethical obligation of our profession.
- Engaging students as partners and sharing the data gathered, process for analysis, final results, conclusions, and actions/decisions in collaboration and dialogue with students

- Partnering with others, including library colleagues both within and outside our institutions, higher education colleagues in a variety of campus units, professional standards bodies, collaborative vendor partners, and others who center student experience, learning, and success in their work.
- Developing our skills over time by identifying supports, professional development, training opportunities, and collaboration with colleagues with similar interests as well as professional standards and literature in libraries and cognate fields including higher education assessment.

Taken as a whole, the panelists and their projects provide examples and inspiration for others as they pursue greater understanding of students and the ways in which libraries contribute to their academic journeys. We hope these examples assist other libraries in developing strategies that align with their unique resources, circumstances, and institutional contexts to optimize student learning and success.

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