RESEARCH AGENDA

Note: The research agenda below focuses on areas of academic library impact on institutional missions (see Figure 10). Each section lists an essential question, surrogates (also known as hallmarks or indicators) for library impact (Markless and Streatfield 2006, 65), data sources, and potential correlations. As the research agenda is explored, librarians may find that some surrogates are stronger than others (Botha, Erasmus and Van Deventer 2009, 110); that some correlations exist or do not; that some causative relationships emerge.

A Bit About Methods

As librarians investigate elements of the research agenda, they may find that some approaches are more or less useful in the effort to articulate and establish library value. Certainly, the true utility of a particular assessment method is based less on the attributes of the method and more on the fit between a method and the research question under investigation. For example, librarians may find that satisfaction surveys are not as useful in the library value arena as outcomes-based surveys; but the actual method—a survey—is not inherently useless or useful. Indeed, a survey can be used to elicit user satisfaction levels (less useful) or self-reported outcomes data (more useful).

When it comes to selecting assessment methods and approaches, academic librarians can learn from their school, public, and special library counterparts. School librarians have established the effectiveness of critical incident surveys that elicit what libraries enable users to do and test audits that identify the impact of libraries on popular measures of student learning. Public librarians have demonstrated the political power of economic value estimations. Special librarians lead the way in showing the value of a library within a larger organization; they pair economic value calculations with critical incident surveys that capture what librarians enable users to do. Taken together, these examples suggest that academic librarians should investigate methods that allow them to capture what academic libraries enable users to do (using surveys or similar methods such as focus groups or interviews); show evidence of student learning (auditing tests and authentic assessments of student learning); and calculate the economic value of libraries (employing established financial value formulas). Academic librarians should also explore promising new approaches to assessment, including balanced scorecards (Brophy 2006, 160; Bielavitz 2010; Wilson, Del Tufo and Norman 2008) and rubrics.
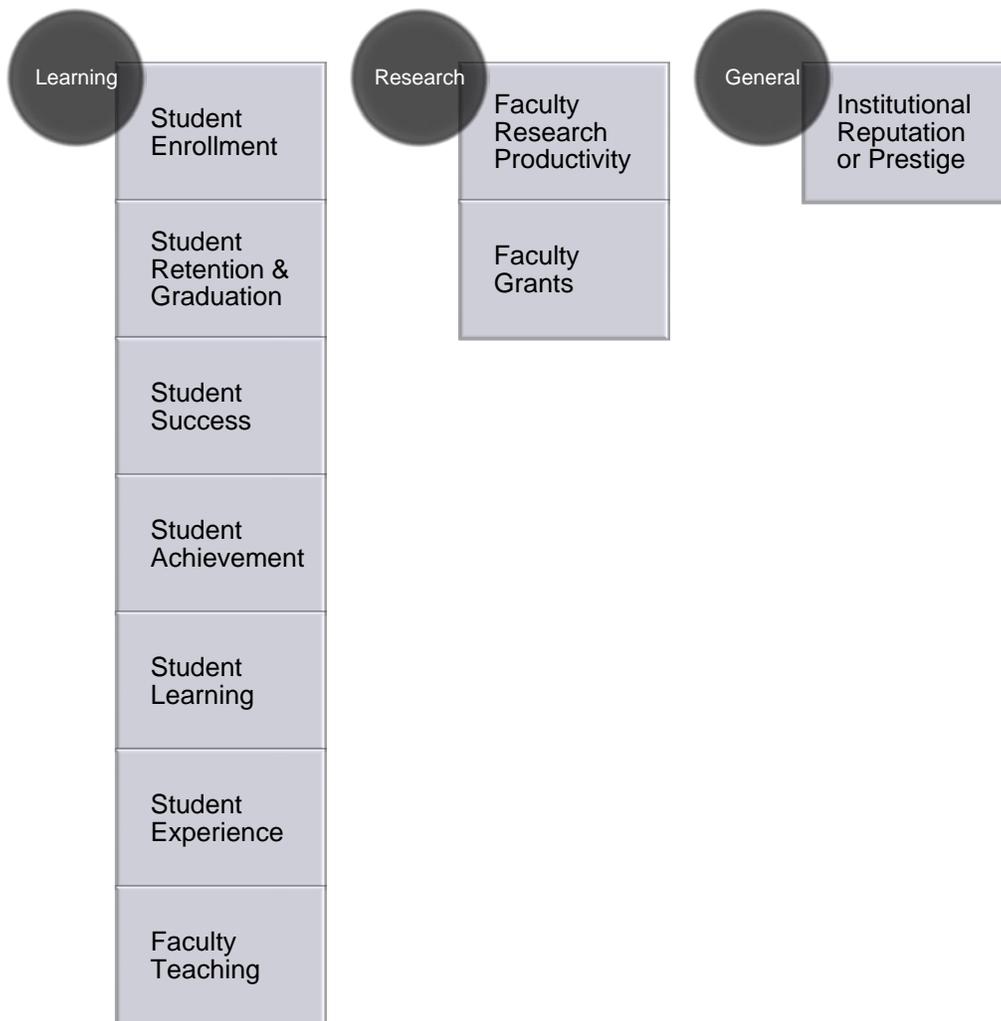
Learning
- Student Enrollment
- Student Retention & Graduation
- Student Success
- Student Achievement
- Student Learning
- Student Experience
- Faculty Teaching

Research
- Faculty Research Productivity
- Faculty Grants

General
- Institutional Reputation or Prestige

Figure 10. Areas of Library Impact on Institutional Missions

Student Enrollment

Essential Question – How does the library contribute to student enrollment?

Institutions of higher education want to admit the strongest possible students at both the undergraduate and graduate levels. Entering student class characteristics are major predictors of institutional rank, prestige, graduation, alumni donations, and other positive markers. According to the Association of Higher Education Facilities Officers, libraries are an important consideration when students select a university or college (Association of Higher Education Facilities Officers 2006), and, as a result, academic libraries can help institutional admissions boost enrollment (Simmel 2007, 88).The library ranked second in terms of facilities important in the selection decision process; only facilities for students' majors ranked higher. Libraries were ranked ahead of technology facilities, the student union center, and even recreational facilities (Michigan Academic Library Council 2007). Even *U.S. News and World Report* suggests libraries should impact college selection (Greer 2010).

Libraries can help their institutions attract the best possible prospective students as well as matriculate the best possible admitted students in a variety of ways depending on the institution type, size, profile, etc. Libraries are often housed in attractive facilities and librarians typically take part in campuswide recruiting and orientation efforts. In addition, some libraries are taking even more direct steps to help their institutions attract and matriculate the best students. At the University of Washington, librarians act as advisors to entering honors students—a service that likely captures the attention of top-notch students and their parents alike. In the future, libraries can take a prominent campus role in reaching key prospective student groups and communicating the ways in which librarians can help students attain academic success. One can imagine assigning incoming students to librarians as "research advisors" and envision librarians innovating ways to provide just-in-time and just-for-you assistance based on students' enrollment records or individual characteristics. Academics conceive of a time when librarians send students instructional content relevant to their newly assigned projects proactively, rather than waiting passively to be asked to help (Eisenberg 2010; Schupe 2007, 53). Such service can target both students of great need and of great potential and possibly increase the strength of enrolling students (institutional outcome), while at the same time delivering excellent information literacy instruction (library outcome).

Surrogates for Library Impact

Surrogates for library impact on student enrollment include **recruitment of prospective students**, **matriculation of admitted students**, and **recommendations of current students**.

Data Sources

To investigate the ways in which libraries currently (or in the future) contribute to student enrollment, librarians can partner with campus colleagues in order to leverage existing data sources unique to the issue of enrollment, including **admissions data**, **admissions student and parent surveys** ("What were the most exciting, inspiring aspects of our campus?"), and student self-reported information on **student engagement surveys** ("Would you attend this institution again? Would you recommend it to a friend?").

Potential Correlations

Librarians need to determine areas for potential connections between surrogates for library impact on institutional mission or outcomes and descriptive library data elements. Are any of the surrogates of library impact on institutional mission or outcomes (listed in the first column) correlated, related, or linked to any descriptive library data elements (in the second column)? Libraries that do not collect data on these surrogates or areas for potential correlations may wish to expand their data collection practices.

Surrogates of library impact on institutional mission/outcomes(s)	Possible Areas of Correlation
Recruitment of prospective students	Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development
Matriculation of admitted students	Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject

	area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development
Recommendations of current students	Are there correlations, relationships or linkages to individual student behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Tutorial logins ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved ✓ Swipe cards on building, library instruction classrooms ✓ Enrollment in courses identified as having high library collections and services usage ✓ Enrollment in for-credit library instruction course ✓ Cohort studies Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development

Student Retention

Essential Question – How does the library contribute to student retention and graduation rates?

Most retention and graduate rate studies have focused on explanations for student persistence or departure, either due to personal characteristics or institutional practices (Bailey 2006, 10). Because most librarians are not in positions that enable them to influence students' personal traits, they can focus on creating institutional environments that foster retention and eventual graduation. To this end, librarians can integrate library services and resources into high-impact educational practices (Kuh, High-Impact Educational Practices 2008) and embrace "proactive early warning and intervention strategies for students with academic deficiencies. There is a substantial difference between providing academic support as a service for students to elect to participate in voluntarily and [an] approach in which student progress is monitored actively in detail, with mandatory intervention if difficulties are encountered" (Ewell and Wellman 2007, 9).

Currently, retention and graduation rates are attracting attention at all levels. Consequently, librarians can investigate the major predictors of persistence and departure, which are largely outside the scope of this report. Librarians can also be well versed in the difficulties of obtaining accurate graduation data.

Surrogates for Library Impact

Surrogates for library impact on student retention and graduation include student **fall-to-fall retention**, **graduation rates (four-year, six-year, at institution of origin, at another institution)**, transfer rates, certificate completion.

Data Sources

To investigate the ways in which libraries currently (or in future) contribute to student retention and graduation rates, librarians can partner with campus colleagues in order to leverage existing data sources, including **registrar records**, **records of individual students' library behaviors**, **IPEDS/NSC data**, and the **Academic Libraries Survey**.

Potential Correlations

Librarians can determine areas for potential connections between surrogates for library impact on institutional mission or outcomes and descriptive library data elements. Are any of the surrogates of library impact on institutional mission or outcomes (listed in the first column) correlated, related, or linked to any descriptive library data elements (in the

---

second column)? Libraries that do not collect data on these surrogates or areas for potential correlations may wish to expand their data collection practices.

Surrogates of library impact on institutional mission/outcomes(s)	Possible Areas of Correlation
Fall-to-fall retention	Are there correlations, relationships or linkages to individual student behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Tutorial logins ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved ✓ Self-reported course material costs saved ✓ Swipe cards on building, library instruction classrooms ✓ Enrollment in courses identified as having high library collections and services usage ✓ Enrollment in for-credit library instruction course ✓ Cohort studies Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development
Graduation rates (four-year, six-year, at institution of origin, at another institution)	Are there correlations, relationships or linkages to individual student behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Tutorial logins ✓ Resources logins, including MyLibrary, MINES data, e-

	resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved ✓ Self-reported course material costs saved ✓ Swipe cards on building, library instruction classrooms ✓ Enrollment in courses identified as having high library collections and services usage ✓ Enrollment in for-credit library instruction course ✓ Cohort studies Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development

Student Success

Essential Question – How does the library contribute to student success?

The term "student success" is often used very generally and broadly. Here, the term is used to denote student ability to do well in internships, secure job placements, earn salaries, gain acceptance to graduate/professional schools, or obtain marketable skills. Although it may be challenging to make direct and clear connections between academic libraries and students' educational and professional futures, librarians can acknowledge that these outcomes are of critical importance to institutions and their stakeholders. Consequently, librarians can investigate the linkages between academic libraries and student success, and—if no linkages currently exist—librarians should form them. For example, institutions place emphasis on students' job placements immediately after college and most invite employers to campus to interview students. Librarians can help students prepare for these interviews by sharing resources, such as company profiles, market analyses, etc., with career resources units on campus and with students directly. When librarians help students secure jobs, their value to their overarching institutions is clear. This principle translates to other student success issues—academic librarians can focus their services on directly and actively supporting institutional outcomes.

Surrogates for Library Impact

Surrogates for library impact on student success include **internship success**, **job placement**, **job salaries**, **professional/graduate school acceptance**, and **marketable skills**.

Data Sources

To investigate the ways in which libraries currently (or in the future) contribute to student success, librarians can partner with campus colleagues in order to leverage existing data sources, including **internship evaluation reports, career services records, alumni surveys, and records of individual students' library behaviors**.

Potential Correlations

Librarians can determine areas for potential connections between surrogates for library impact on institutional mission or outcomes and descriptive library data elements. Are any of the surrogates of library impact on institutional mission or outcomes (listed in the first column) correlated, related, or linked to any descriptive library data elements (in the second column)? Libraries that do not collect data on these surrogates or areas for potential correlations may wish to expand their data collection practices.

Surrogates of library impact on institutional mission/outcomes(s)	Possible Areas of Correlation
Internship success	Are there correlations, relationships, or linkages to individual student behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Tutorial logins ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved ✓ Swipe cards on building, library instruction classrooms ✓ Enrollment in courses identified as having high library collections and services usage ✓ Enrollment in for-credit library instruction course ✓ Cohort studies Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development
Job placement	Are there correlations, relationships or linkages to individual student behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Tutorial logins ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved

	✓ Swipe cards on building, library instruction classrooms ✓ Enrollment in courses identified as having high library collections and services usage ✓ Enrollment in for-credit library instruction course ✓ Cohort studies Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development
Job salaries	Are there correlations, relationships or linkages to individual student behavior in these areas? Note: these library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Tutorial logins ✓ Resources logins including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved ✓ Swipe cards on building, library instruction classrooms ✓ Enrollment in courses identified as having high library collections and services usage ✓ Enrollment in for-credit library instruction course ✓ Cohort studies Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use

	✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development
Professional/graduate school acceptance	Are there correlations, relationships, or linkages to individual student behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Tutorial logins ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved ✓ Swipe cards on building, library instruction classrooms ✓ Enrollment in courses identified as having high library collections and services usage ✓ Enrollment in for-credit library instruction course ✓ Cohort studies Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development
Marketable skills	Are there correlations, relationships, or linkages to individual student behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Tutorial logins

	✓ Resources logins, including MyLibrary, MINES data, e-resources, etc.
	✓ Resource login/logout surveys
	✓ Self-reported usage
	✓ Self-reported time saved
	✓ Swipe cards on building, library instruction classrooms
	✓ Enrollment in courses identified as having high library collections and services usage
	✓ Enrollment in for-credit library instruction course
	✓ Cohort studies
	Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations.
	✓ Library expenditures
	✓ Collection value
	✓ Collection use, physical and online, may divide by subject area or other criteria
	✓ Space use
	✓ Service use, including reference, ILL, reserves, etc.
	✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc.
	✓ Library ranking
	✓ Library awards
	✓ Librarian staffing levels or ratio of user group to librarian
	✓ Librarian skills or participation in professional development

Student Achievement

Essential Question – How does the library contribute to student achievement?

Like the term "student success," "student achievement" is often used very generally and broadly. In this context, student achievement refers to GPA and professional/educational test scores. Librarians can conduct test item audits of major professional/educational tests to determine correlations between information skills and specific test items. As an example, the box below reveals possible connections between the CAAP test and the Information Literacy Competency Standards for Higher Education. These connections are based on an analysis of CAAP practice exams.

CAAP Reading	ACRL Standard 3, Performance Indicator 1: The information literate student summarizes the main ideas to be extracted from the information gathered.
CAAP Critical Thinking	ACRL Standard 3, Performance Indicator 2: The information literate student articulates and applies initial criteria for evaluating both the information and its sources; ACRL Standard 3, Performance Indicator 3: The information literate student synthesizes main ideas to construct new concepts; ACRL Standard 3, Performance Indicator 4: The information literate student compares new knowledge with prior knowledge to determine the value added, contradictions, or other unique characteristics of the information.
CAAP Science Reasoning	ACRL Standard 3, Performance Indicator 1: The information literate student summarizes the main ideas to be extracted from the information gathered; ACRL Standard 3, Performance Indicator 3: The information literate student synthesizes main ideas to construct new concepts.

Surrogates for Library Impact

Surrogates for library impact on student enrollment include course completions, **GPA** and **professional/educational test scores** such as the GRE, MCAT, LSAT, CAAP, CLA, MAPP, and other licensure tests.

Data Sources

To investigate the ways in which libraries currently (or in the future) contribute to student achievement, librarians can partner with campus colleagues in order to leverage existing data sources, including **registrar records, institutional test score reports, test item audits, and records of individual students' library behaviors**.

Potential Correlations

Librarians can determine areas for potential connections between surrogates for library impact on institutional mission or outcomes and descriptive library data elements. Are any of the surrogates of library impact on institutional mission or outcomes (listed in the first column) correlated, related, or linked to any descriptive library data elements (in the second column)? Libraries that do not collect data on these surrogates or areas for potential correlations may wish to expand their data collection practices.

Surrogates of library impact on institutional mission/outcomes(s)	Possible Areas of Correlation
GPA	Are there correlations, relationships, or linkages to individual student behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Tutorial logins ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved ✓ Swipe cards on building, library instruction classrooms ✓ Enrollment in courses identified as having high library collections and services usage ✓ Enrollment in for-credit library instruction course ✓ Cohort studies Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development
Professional/educational test	Are there correlations, relationships, or linkages to individual

scores	student behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value.
	✓ Circulation counts
	✓ Tutorial logins
	✓ Resources logins, including MyLibrary, MINES data, e-resources, etc.
	✓ Resource login/logout surveys
	✓ Self-reported usage
	✓ Self-reported time saved
	✓ Swipe cards on building, library instruction classrooms
	✓ Enrollment in courses identified as having high library collections and services usage
	✓ Enrollment in for-credit library instruction course
	✓ Cohort studies
	Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations.
	✓ Library expenditures
	✓ Collection value
	✓ Collection use, physical and online, may divide by subject area or other criteria
	✓ Space use
	✓ Service use, including reference, ILL, reserves, etc.
	✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc.
	✓ Library ranking
	✓ Library awards
	✓ Librarian staffing levels or ratio of user group to librarian
	✓ Librarian skills or participation in professional development

Student Learning

Essential Question – How does the library contribute to student learning?

Although the literature of information literacy instruction and assessment is voluminous, most of the literature is sporadic, disconnected, and reveals limited snapshots of the impact of academic libraries on learning. Academic librarians require systematic, coherent, and connected evidence to establish the role of libraries in student learning. Assessment management systems provide the structure that is absolutely critical to establishing a clear picture of how academic libraries contribute to student learning.

In addition to direct measures of student learning (made coherent through use of an assessment management system), it is often helpful to gather faculty judgments of student work and any changes in quality that result from library instruction and interaction.

Surrogates for Library Impact

Surrogates for library impact on student learning include **learning assessments**, and **faculty judgments** of student learning gains. Learning assessments should be authentic, integrated performance assessments focused on campus learning outcomes including information literacy. However, their formats are flexible and may include research journals reflective writing, "think alouds," self or peer evaluations, research drafts or papers, open-ended question responses, works cited pages, annotated bibliographies, speeches, multimedia presentations, and other formats (Oakleaf, Writing Information Literacy Assessment Plans 2010). In order to give order and structure to a variety of learning assessments enacted by different librarians and completed by different students, librarians can develop or purchase **assessment management systems**. Without assessment management systems, student learning assessments tend to be disorganized and defy attempts to massage them into meaningful reports that can be shared campuswide. With them, evidence of the student learning impact of libraries can be managed, documented, shared, and used to make future instructional improvements.

Data Sources

To investigate the ways in which libraries currently (or in future) contribute to student learning, librarians can partner with campus colleagues in order to leverage existing data sources, including **assessment management systems, faculty surveys, and records of individual students' library behaviors**.

Potential Correlations

Librarians can determine areas for potential connections between surrogates for library impact on institutional mission or outcomes and descriptive library data elements. Are any of the surrogates of library impact on institutional mission or outcomes (listed in the first column) correlated, related, or linked to any descriptive library data elements (in the second column)? Libraries that do not collect data on these surrogates or areas for potential correlations may wish to expand their data collection practices.

Surrogates of library impact on institutional mission/outcomes(s)	Possible Areas of Correlation
Learning assessments	Are there correlations, relationships, or linkages to individual student behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Tutorial logins ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved ✓ Swipe cards on building, library instruction classrooms ✓ Enrollment in courses identified as having high library collections and services usage ✓ Enrollment in for-credit library instruction course ✓ Cohort studies Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development
Faculty judgments	Are there correlations, relationships, or linkages to individual student behavior in these areas? Note: These library user

	interactions must be captured in order to be correlated, related, or linked to surrogates of library value.
	✓ Circulation counts
	✓ Tutorial logins
	✓ Resources logins, including MyLibrary, MINES data, e-resources, etc.
	✓ Resource login/logout surveys
	✓ Self-reported usage
	✓ Self-reported time saved
	✓ Swipe cards on building, library instruction classrooms
	✓ Enrollment in courses identified as having high library collections and services usage
	✓ Enrollment in for-credit library instruction course
	✓ Cohort studies
	Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations.
	✓ Library expenditures
	✓ Collection value
	✓ Collection use, physical and online, may divide by subject area or other criteria
	✓ Space use
	✓ Service use, including reference, ILL, reserves, etc.
	✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc.
	✓ Library ranking
	✓ Library awards
	✓ Librarian staffing levels or ratio of user group to librarian
	✓ Librarian skills or participation in professional development

Student Experience, Attitude, and Perception of Quality

Essential Question – How does the library contribute to the student experience?

What can libraries do to enhance student engagement? Libraries can integrate their resources and services into any high-impact activities their institutions offer (Kuh, High-Impact Educational Practices 2008, 19). High-impact practices include: first-year seminars and experiences, common intellectual experiences, learning communities, writing-intensive courses, collaborative assignments and projects, undergraduate research, diversity/global learning, service learning/communitybased learning, internships, capstone courses and projects (Kuh, High-Impact Educational Practices 2008, 9-11).

Student experience studies tend to focus on the entire student experience and often do not include questions directly related to libraries. However, there are questions that are at least tangentially related to information behaviors, and these questions may reveal information about the impact of the academic library on student impact. Librarians can continue to work to develop library-related questions to augment these national surveys as well as local institutional surveys, especially aimed at seniors and alumni. Finally, librarians can deploy "help" studies to explore how academic libraries contribute to student experiences.

Surrogates for Library Impact

Surrogates for library impact on student engagement include **self-report engagement studies**, **senior/alumni surveys**, **help surveys** and **alumni membership, donations, or endowments**.

Data Sources

To investigate the ways in which libraries currently (or in future) contribute to student learning, librarians can partner with campus colleagues in order to leverage existing data sources, including **self-report engagement surveys, senior/alumni surveys, help surveys, alumni donations, and records of individual students' library behaviors**.

Examples of national engagement survey questions that can serve as data sources are included below.

National Survey of Student Engagement
NSSE 1. *In your experience at your institution during the current school year, about how often have you done each of the following?*

NSSE 1d. Worked on a paper or project that required integrating ideas or information from various sources.

NSSE 2. *During the current school year, how much has your coursework emphasized the following mental activities?*

NSSE 2b. Analyzing the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components.

NSSE 2c. Synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships.

NSSE 2d. Making judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions.

NSSE 3. *During the current school year, about how much reading and writing have you done?*

NSSE 3b. Number of books read on your own (nonassigned) for personal enjoyment or academic enrichment.

NSSE 3c. Number of written papers or reports of 20 pages or more.

NSSE 3d. Number of written papers or reports between 5 and 19 pages.

NSSE 3e. Number of written papers or reports of fewer than 5 pages.

NSSE 7. Which of the following have you done or do you plan to do before you graduate from your institution?

NSSE 7d. Work on a research project with a faculty member.

NSSE 7h. Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, etc.)

NSSE 10. *To what extent does your institution emphasize each of the following?*

NSSE 10b. Providing the support you need to help you succeed academically.

NSSE 11. *To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?*

NSSE 11b. Acquiring job or work-related knowledge and skills.

NSSE 11e. Thinking critically and analytically.

NSSE 11g. Using computing and information technology.

NSSE 13. *How would you evaluate your entire educational experience at this institution?*

NSSE 14. *If you could start over again, would you go to the same institution you are now attending?*

NSSE 25. *What have most of your grades been up to now at this institution?*

Faculty Survey of Student Engagement
FSSE *To what extent does your institution emphasize each of the following?* Providing students the support they need to help them succeed academically. FSSE *About how many hours do you spend in a typical 7-day week doing each of the following?* Research and scholarly activities. Working with undergraduates on research. Reflecting on ways to improve my teaching. FSSE *In your selected course section, about how much reading and writing do you assign students? Or do you estimate the typical student has done?* Number of books read on his or her own (not assigned) for personal enjoyment or academic enrichment Number of written papers or reports of 20 pages or more. Number of written papers or reports between 5 and 19 pages. Number of written papers or reports of fewer than 5 pages. FSSE *In your selected course section, how important to you is it that your students do the following?* Work on a paper or project that requires integrating ideas or information from various sources. FSSE *In your selected course section, how much emphasis do you place on engaging students in each of these mental activities?* Analyzing the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components. Synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships. Making judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions. FSSE *To what extent do you structure your selected course section so that students learn and develop in the following areas? To what extent has the typical student's experience at this institution contributed to his or her knowledge, skills, and personal development in the following areas?* Learning effectively on his or her own. Thinking critically and analytically. Using computing and information technology.

Developing a personal code of values and ethics.

Acquiring a broad general education.

Acquiring job or work-related knowledge and skills.

FSSE *How important is it to you that undergraduates at your institution do the following?*

Work on a research project with a faculty member outside of course or program requirements.

Independent study or self-designed major.

Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, etc.).

Beginning College Survey of Student Engagement

BCSSE 7. During your last year of high school, about how much reading and writing did you do?

BCSSE 7b. Books read on your own (not assigned) for personal enjoyment or academic enrichment.

BCSSE 7c. Writing short papers or reports (5 or fewer pages).

BCSSE 7d. Writing longer papers or reports (more than 5 pages).

BCSSE 13. *During the coming school year, about how many hours do you think you will spend in a typical 7-day week doing each of the following?*

BCSSE 13a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities).

BCSSE 14. *During the coming school year, about how often do you expect to do each of the following?*

BCSSE 14c. Work on a paper or project that requires integrating ideas or information from various sources.

BCSSE 15. *During the coming school year, how certain are you that you will do the following?*

BCSSE 15b. Find additional information for course assignments when you don't understand the material.

BCSSE 17. *How prepared are you to do the following in your academic work at this college?*

BCSSE 17c. Think critically and analytically.

BCSSE 17e. Use computing and information technology.

BCSSE 17g. Learn effectively on your own.

BCSSE 18. *How important is it to you that your college or university provides each of the following?*

BCSSE 18a. A challenging academic experience.

BCSSE 18b. Support to help you succeed academically.

BCSSE 21. *What do you expect most of your grades will be at this college during the coming year?*

BCSSE 23. *What is the highest academic degree that you intend to obtain at this or any college?*

Community College Survey of Student Engagement
CCSSE 4. *In your experience at this college during the current school year, about how often have you done each of the following?*
CCSSE 4d. Worked on a paper or project that required integrating ideas or information from various sources.
CCSSE 4j. Used the Internet or instant messaging to work on an assignment.
CCSSE 5. *During the current student year, how much has your coursework at this college emphasized the following mental activities?*
CCSSE 5b. Analyzing the basic elements of an idea, experience, or theory.
CCSSE 5c. Synthesizing and organizing ideas, information, or experiences in new ways.
CCSSE 5d. Making judgments about the value or soundness of information, arguments, or methods.
CCSSE 5f. Using information you have read or heard to perform a new skill.

Academic librarians might also explore an approach school librarians pioneered: surveys that ask library users to describe what the academic library has enabled them to accomplish. Special library impact studies are also good models for this approach. A pilot study of this type was conducted in spring 2010 at Trinity University, and the text is included below.

1. Think about a time when the university library helped you. What help did you receive? What did the help enable you to do? [text box, 1,000 characters]
2. Think about a time when the university library didn't help you. What help would you have liked to receive? What would that help have enabled you to do? [text box, 1,000 characters]
3. What is your year in school?
   a. First-Year
   b. Sophomore
   c. Junior
   d. Senior
   e. Other: [text box, 50 characters]
4. What is your major? [Drop down]
5. What is your GPA on 4.0 scale? [Drop down]

6. Do you expect to graduate on time? [Y/N]
7. If you could start over again, would you go to the institution you're attending now? [Y/N]
8. Would you recommend attending your institution to a friend? [Y/N]

Thank you for your participation in this survey. Your responses will help the university library be more helpful in the future!

Potential Correlations

Librarians can determine areas for potential connections between surrogates for library impact on institutional mission or outcomes and descriptive library data elements. Are any of the surrogates of library impact on institutional mission or outcomes (listed in the first column) correlated, related, or linked to any descriptive library data elements (in the second column)? Libraries that do not collect data on these surrogates or areas for potential correlations may wish to expand their data collection practices.

Surrogates of library impact on institutional mission/outcomes(s)	Possible Areas of Correlation
Self-report engagement surveys	Are there correlations, relationships or linkages to individual student behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Tutorial logins ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved ✓ Swipe cards on building, library instruction classrooms ✓ Enrollment in courses identified as having high library collections and services usage ✓ Enrollment in for-credit library instruction course ✓ Cohort studies Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web

	sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development
Senior/alumni surveys	Are there correlations, relationships, or linkages to individual student behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Tutorial logins ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved ✓ Swipe cards on building, library instruction classrooms ✓ Enrollment in courses identified as having high library collections and services usage ✓ Enrollment in for-credit library instruction course ✓ Cohort studies Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development
Help surveys	Are there correlations, relationships, or linkages to individual student behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Tutorial logins ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys

	✓ Self-reported usage ✓ Self-reported time saved ✓ Swipe cards on building, library instruction classrooms ✓ Enrollment in courses identified as having high library collections and services usage ✓ Enrollment in for-credit library instruction course ✓ Cohort studies Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development
Alumni memberships, donations, or endowments	Are there correlations, relationships, or linkages to individual student behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Tutorial logins ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved ✓ Swipe cards on building, library instruction classrooms ✓ Enrollment in courses identified as having high library collections and services usage ✓ Enrollment in for-credit library instruction course ✓ Cohort studies Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject

	area or other criteria
	✓ Space use
	✓ Service use, including reference, ILL, reserves, etc.
	✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc.
	✓ Library ranking
	✓ Library awards
	✓ Librarian staffing levels or ratio of user group to librarian
	✓ Librarian skills or participation in professional development

Faculty Research Productivity

**Essential Question – How does the library contribute to faculty research
productivity (or tenure and promotion decisions)?**

Librarians contribute to faculty research productivity in a number of ways. Some of
these ways are collection-focused; others are service-focused. To some degree,
librarians have investigated the impact of collections on faculty productivity, but much
work is left to be done in the service sector. How do librarians serve faculty who are
preparing publications, presentations, or patent applications? How do librarians help
faculty prepare their tenure and promotion packages? Happily, surrogates for faculty
research productivity are well established (see Faculty Productivity section in Review
and Analysis of the Research section earlier in this report); the challenge for librarians is
to collect data on those surrogates for individual faculty and correlate them to individual
faculty behavior and library characteristics.

Surrogates for Library Impact

Surrogates for library impact on faculty productivity include **numbers of publications**,
numbers of patents, **number of research-generated products, value of technology
transfer**, and **tenure/promotion judgments**.

Data Sources

To investigate the ways in which libraries currently (or in future) contribute to faculty
research productivity, librarians can partner with campus colleagues in order to leverage
existing data sources, including **curriculum vitae analysis**, **publication citation
analysis**, **institutional faculty records**, **tenure/promotion records**, and **records of
individual faculty members' library behaviors**, **including records of
faculty/librarian research collaborations**.

Potential Correlations

Librarians can determine areas for potential connections between surrogates for library
impact on institutional mission or outcomes and descriptive library data elements. Are
any of the surrogates of library impact on institutional mission or outcomes (listed in the
first column) correlated, related, or linked to any descriptive library data elements (in the
second column)? Libraries that do not collect data on these surrogates or areas for
potential correlations may wish to expand their data collection practices.

Surrogates of library impact on institutional mission/outcomes(s)	Possible Areas of Correlation
Numbers of publications, numbers of patents, number of research-generated products, or value of technology transfer	Are there correlations, relationships, or linkages to individual faculty behavior in these areas? Note: these library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development
Tenure/promotion judgments	Are there correlations, relationships or linkages to individual faculty behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject

	area or other criteria
	✓ Space use
	✓ Service use, including reference, ILL, reserves, etc.
	✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc.
	✓ Library ranking
	✓ Library awards
	✓ Librarian staffing levels or ratio of user group to librarian
	✓ Librarian skills or participation in professional development

Faculty Grants

Essential Question – How does the library contribute to faculty grant proposals and funding?

Librarians contribute to faculty grant proposals in a number of ways. Recent studies have documented the contribution of library resources to citations in grant applications (P. Kaufman, Library as Strategic Investment 2008). In addition, academic librarians can investigate other ways in which libraries contribute to the preparation of grant proposals, funded and unfunded.

Surrogates for Library Impact

Surrogates for library impact on faculty grants include **numbers of grant proposals** and **numbers of grants funded**.

Data Sources

To investigate the ways in which libraries currently (or in future) contribute to faculty grant proposals and funding, librarians can partner with campus colleagues in order to leverage existing data sources, including **office of sponsored programs records**, and **records of individual faculty members' library behaviors**, **including records of faculty/librarian grant collaborations**.

Potential Correlations

Librarians can determine areas for potential connections between surrogates for library impact on institutional mission or outcomes and descriptive library data elements. Are any of the surrogates of library impact on institutional mission or outcomes (listed in the first column) correlated, related, or linked to any descriptive library data elements (in the second column)? Libraries that do not collect data on these surrogates or areas for potential correlations may wish to expand their data collection practices.

Surrogates of library impact on institutional mission/outcomes(s)	Possible Areas of Correlation
Numbers of grant proposals (funded or unfunded), value of grants funded	Are there correlations, relationships or linkages to individual faculty behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value.

	✓ Circulation counts ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development

Faculty Teaching

Essential Question – How does the library contribute to faculty teaching?

Librarians contribute to faculty teaching in a variety of ways. Most librarians think only of their contributions to library instruction, such as guest lectures, online tutorials, and LibGuides. However, libraries contribute to faculty teaching in a variety of ways. They provide resources that are integrated into course materials on a massive scale (a value that is long overdue to be adequately captured and communicated). They collaborate with faculty on curriculum, assignment, and assessment design. They also provide resources that cover the scholarship of teaching and learning; some libraries also partner in campuswide teaching and learning support centers. Finally, librarians often contribute to teaching and learning outside the traditional classroom by partnering with student affairs professionals on campus.

Surrogates for Library Impact

Surrogates for library impact on faculty teaching include **integration of library resources and services into course syllabi, course Web sites, lectures, labs, texts, reserve readings, cocurricular activities, etc.**; **faculty/librarian or student affairs professional/librarian instructional collaborations**; **cooperative curriculum, assignment, project, or assessment design**; and **resources on the scholarship of teaching and learning**.

Data Sources

To investigate the ways in which libraries currently (or in future) contribute to faculty teaching, librarians can partner with campus colleagues in order to leverage existing data sources, including **course syllabi, Web sites, reserves etc.**, and **records of individual faculty members' library behaviors**, **including records of faculty/librarian or student affairs professional/librarian instructional collaborations**, and **records of cooperative curriculum, assignment, project, or assessment design**.

Potential Correlations

Librarians can determine areas for potential connections between surrogates for library impact on institutional mission or outcomes and descriptive library data elements. Are any of the surrogates of library impact on institutional mission or outcomes (listed in the first column) correlated, related, or linked to any descriptive library data elements (in the second column)? Libraries that do not collect data on these surrogates or areas for potential correlations may wish to expand their data collection practices.

Surrogates of library impact on institutional mission/outcomes(s)	Possible Areas of Correlation
Integration of library resources and services into course syllabi, Web sites, lectures, labs, texts, reserve readings, cocurricular activities, etc.	Are there correlations, relationships or linkages to individual faculty behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development
Faculty/librarian instructional collaborations; student affairs professional/librarian collaborations; cooperative curriculum, assignment, project, or assessment design	Are there correlations, relationships, or linkages to individual faculty behavior in these areas? Note: These library user interactions must be captured in order to be correlated, related, or linked to surrogates of library value. ✓ Circulation counts ✓ Resources logins, including MyLibrary, MINES data, e-resources, etc. ✓ Resource login/logout surveys ✓ Self-reported usage ✓ Self-reported time saved Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject

	area or other criteria
	✓ Space use
	✓ Service use, including reference, ILL, reserves, etc.
	✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc.
	✓ Library ranking
	✓ Library awards
	✓ Librarian staffing levels or ratio of user group to librarian
	✓ Librarian skills or participation in professional development

Institutional Reputation or Prestige

Essential Question – How does the library contribute to overall institutional reputation or prestige?

Academic libraries can augment their institution's reputation and prestige in four main ways not mentioned elsewhere in this Research Agenda. First, they can help department chairs to recruit instructors (Simmel 2007, 88). Traditionally, libraries contributed to faculty recruitment (Cluff and Murrah 1987) by building collections that support faculty activities. In the future, librarians have opportunities to be more proactive in this area by actively engaging in dialogue with "star" faculty recruits prior to their hiring. Second, strong libraries, especially those that win awards or other distinctions, may also impact institutional rank by bringing attention to the institution and therefore potentially influencing the peer assessments that make up a large portion of well-known ranking entities. (Note: Libraries also have the potential to contribute substantially to other portions of institutional ranking formulae.) Third, libraries that include renowned special collections may bring significant prestige to their institutions (Fister 2010). Special collections can be the "differentiating characteristic of research universities, the equivalent of unique laboratory facilities that attract faculty and research projects" (Pritchard, Special Collections Surge to the Fore 2009). Finally, library services and resources support institutional engagement in service to their communities by providing community members with "helpful, valuable, valid, and reliable information" (R. Kaufman 2001, 13) locally, nationally, and globally.

Surrogates for Library Impact

Surrogates for library impact on institutional reputation or prestige include **faculty recruitment**, **institutional ranking**, attention-getting **special collections**, and **institutional community engagement**.

Data Sources

To investigate the ways in which libraries currently (or in future) contribute to institutional reputation or prestige, librarians can partner with campus colleagues in order to leverage existing data sources, including **human resources records**, *U.S. News and World Report* **or other institutional rankings**, **special collections value estimates**, and **records that document institutional community engagement**.

Potential Correlations

Librarians can determine areas for potential connections between surrogates for library impact on institutional mission or outcomes and descriptive library data elements. Are any of the surrogates of library impact on institutional mission or outcomes (listed in the first column) correlated, related, or linked to any descriptive library data elements (in the second column)? Libraries that do not collect data on these surrogates or areas for potential correlations may wish to expand their data collection practices.

Surrogates of library impact on institutional mission/outcomes(s)	Possible Areas of Correlation
Faculty recruitment	Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development
Institutional rankings	Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Special collections expenditures ✓ Collection value ✓ Special collections value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Special collections use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Special collections space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including special collections reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc.

	✓ Service use, including special collections instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Special collections awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Special collections librarian staffing levels or ratio of user group to special collections librarian ✓ Librarian skills or participation in professional development ✓ Special collections librarian skills or participation in professional development
Community engagement	Are there correlations, relationships, or linkages to these macro-level areas? Note: Macro-level areas are fertile territory for ROI calculations. ✓ Library expenditures ✓ Collection value ✓ Collection use, physical and online, may divide by subject area or other criteria ✓ Space use ✓ Service use, including reference, ILL, reserves, etc. ✓ Service use, including instruction, integration of library resources and services into course syllabi, course Web sites, lectures, labs, reserve readings, etc. ✓ Library ranking ✓ Library awards ✓ Librarian staffing levels or ratio of user group to librarian ✓ Librarian skills or participation in professional development