# Australian Academic & Research Libraries Volume 42 Number 1 March 2011



What's the value of an academic library? The development of the ACRE value of academic libraries comprehensive research review and report Megan Oakleaf

> Writing it up: getting your LIS research out there Mary Anne Kennan and Michael R Olsson

Building pathways to working with collections: Can internships and student work experience help? Marian Hoy

Are they ready? Exploring student information literacy skills in the transition from secondary to tertiary education Fiona Salisbury and Sharon Karasmanis

Australian Library and Information Association

ISSN 0004-8623

# WHAT'S THE VALUE OF AN ACADEMIC LIBRARY? THE DEVELOPMENT OF THE ACRL VALUE OF ACADEMIC LIBRARIES COMPREHENSIVE RESEARCH REVIEW AND REPORT

## Megan Oakleaf

gan

ie of

cess ing. one

this 1 at

om get t is ent

uth ose ing

his

of

tly.

ork

les

ıll, ew

nt

er

in

or

. I

re

ťΟ

ıd

This paper provides an overview of the process undertaken in the US during 2009/10 in developing a major report on the value of academic libraries. A summary of the key findings and recommendations from the report are also provided. While very much focused on the US situation, the author feels the findings may well have resonance elsewhere, including Australia.

Megan Oakleaf, i-School, Syracuse University , NY 13244 USA. Email: moakleaf@syr.edu

nce considered the heart of the university, academic libraries today face questions about their institutional relevance and value. Higher education stakeholders, the general public, and even librarians themselves wonder, "What is the value of an academic library?" Over recent decades, waves of technological, educational, and economic changes have eroded the heretofore assumed value and expected impact of academic libraries. First, the emergence of the Internet, increasingly user-friendly access systems, and Web 2.0 technologies facilitated the users' ability to access information without librarian assistance and blurred distinctions among good, bad, and mediocre information. Consequently, users are often satisfied with general information they can find with a few keystrokes and a mainstream search engine, rather than demanding the quality information found primarily in libraries. Second, the value of higher education itself is no longer a given. Publications like Academically adrift: limited learning on college campuses have lead higher education stakeholders as well as the public to challenge the impact of undergraduate education on students, employers, and national economies. Because academic libraries are entrenched in their educational institutions, doubts about higher education affect

perceptions of academic libraries as well. Third, the recent economic recession has decimated higher education budgets. Shrinking budgets force questions of relevance on campus: "Which units help us achieve our missions? Which units can we eliminate and which do we keep?" Unfortunately, academic libraries are not always considered mission critical within an institution. In contrast, some may even be considered budgetary black holes where financial resources disappear without an obvious return.

### THE OVERARCHING INITIATIVE

In such a climate, higher education stakeholders and the general public are not the only ones calling for academic libraries to articulate their value. Academic librarians also have questions: "What do we know about academic library value? What do we know about the value of other types of libraries that we can apply to the academic library domain? How do we respond to questions that challenge our value and impact?"

Recognizing the need for decisive answers about academic library value, the Association of College and Research Libraries (ACRL) launched a Value of academic libraries initiative. The primary goal of the initiative was to answer questions of library value using existing information and, in the future, develop new ways to demonstrate library value clearly, measurably, and meaningfully. As a first step, ACRL decided to commission the Value of academic libraries comprehensive review and report and issued a request for proposals in the fall of 2009. In December 2009, ACRL selected the author to carry out the report.

They charged the author to achieve a number of outcomes, including to:

- 1. define library value in the context of institutional missions,
- 2. identify existing research about library value,
- 3. determine gaps in the research,
- extrapolate and articulate best practices, successful techniques/ methodologies, and lessons learned from past library value efforts, including those focusing on other library domains (school, public, special),
- 5. assess the applicability of these practices, techniques/methodologies, and lessons to the academic library domain,
- 6. suggest "next steps" for academic library value research,
- 7. identify measurable surrogates of academic library value,
- 8. articulate an academic library value research agenda,
- 9. provide an executive summary appropriate for sharing with institutional administrators.

The ACRL Board reviewed a draft report at the American Library Association Annual Conference in July 2010 and the final report was released as a pdf online mic recession questions of Which units mic libraries In contrast, ial resources

iblic are not

Academic

Prary value?

e can apply

at challenge

value, the
a Value of
to answer
re, develop
ngfully. As
comprehensive
December

chniques/ ry value s (school,

dologies,

itutional

ociation f online

\_ibraries

in September 2010 (http://www.acrl.ala.org/value/). A bound copy is also available for purchase on Amazon (http://www.amazon.com/dp/0838985688/ref=cm\_sw\_su\_dp).

### THE PLAYERS

The Value of academic libraries report was written by one author with an advisory panel of four experts and the support of four assistant researchers. The advisory panel included George Kuh, a recognized expert in higher education assessment; Martha Kyrillidou, senior director of the Association of Research Libraries (ARL) statistics and service quality programs; Bruce Kingma, economist and member of the IMLS-funded Lib-Value grant; and Debra Gilchrist, Dean of Libraries and Institutional Effectiveness for Pierce College. The advisory panel offered suggestions throughout the process and provided feedback on early drafts of the report.

The assistant researchers are all practicing librarians who offered substantial expertise in their respective library domains. Patricia L. Owen, a National Board certified school librarian in Ohio conducted the school library literature search; Leah Sopchak Kraus, a public librarian in Fayetteville, New York, initiated the public library research; and Tamika Barnes, a librarian at the Environmental Protection Agency, and Anna Dahlstein, an independent researcher, combed special library publications for relevant literature. These assistant researchers conducted the "first cut" of literature searching in non-academic library domains and provided the author with critical summaries of school, public, and special library value literature.

With support from the advisory panel and assistant researchers, the author developed the *Value of academic library* report using the process described below.

### THE PROCESS

The process of compiling the Value of academic libraries report was achieved in five major steps.

- 1. The author provided direction and instruction for the literature search process conducted by research assistants.
- 2. The author and research assistants searched the literature in their specified area. The research assistants read, summarized, and annotated specific resources, then made a "first cut" before forwarding them to the author. The author combined these resources with her own literature searches and identified resources deemed relevant for inclusion in the report.
- 3. The author analyzed identified resources to create a summary of literature from all types of libraries related to the demonstration of library value. She emphasized best practices and dominant methods as well as those that are underused. She highlighted the methods that are most relevant and transferable to the academic library environment.

- 4. The author extrapolated recommendations for academic libraries. These recommendations include ideas for defining academic library value in terms of institutional goals, identifying measurable surrogates for academic library impact, collecting relevant data, and employing best practices and tools for documenting and articulating library value.
- The author produced a final report and submitted it for publication.

Although this five-step process appears straightforward and linear, it was not. For example, some tasks related to managing the process, reviewing the literature, and crafting the report are omitted from this list (see Figure 1). In addition, steps 2 and 3 were cyclical (see Figure 2). The cyclical nature of these steps was due in large part to the wide variety of relevant library value literature that the author processed: scholarly and trade articles; monographs; websites; data and statistical sources; white papers, preprints, and other gray literature; conversations with librarians, vendors, and library value experts; conference presentations and proceedings; and professional listservs, blogs, wikis, and other 2.0 resources. In addition to library-centric literature, the author also included higher education resources in order to provide an institutional context for the report.

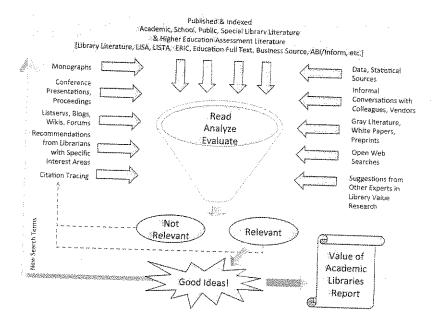


Figure 1. Sample Author Tasks

libraries. ic library surrogates imploying try value.

cation.

s not. For literature, ion, steps vas due in he author statistical ions with tions and urces. In education

istical

tions with is, Vendors rature, pers,

ns from erts in due

....

The author read, analyzed, and evaluated each item for inclusion in the final report. Evaluation criteria included:

- research quality including use of appropriate research methodology,
- ability to contribute to the documentation of academic library value,
- articulation of library impact on the missions/goals of the larger institution,
- · depiction of models for best practices,
- outcome-based perspective (Oakleaf, 2010: 25).

Relevant literature yielded content for the Value of academic libraries report and, in some cases, ideas for new search terms. Based on the literature, the author extrapolated recommendations for library value, identified potential surrogates, and suggested possible areas of correlation to collectable library data. These recommendations, surrogates, and correlations are outlined in the "Next Steps" and "Research Agenda" sections of the report. Finally, the citation lists of all resources were mined for additional literature.

- Supervised literature searches conducted by research assistants.
- · Maintained adherence to a schedule of completion.
- · Supervised the project budget.
- Communicated with ACRL leadership, the advisory team, and all research assistants.

### Reviewing

- Conducted literature searches focusing on academic libraries and higher education assessment.
- · Identified relevant literature from searches.
- · Read and evaluated literature for inclusion in the report
- · Analyzed literature for content contributions.
- · Drafted literature summary.
- · Identified best practices and research gaps.
- Assessed application of practices and research to the academic library environment.
- · Formulated recommendations for future practice.

### Resembling

- Composed the report, including an executive summary, the body of the report, numerous recommendations for next steps, a research agenda.
- · Compiled an extensive bibliography.
- · Created a practical "getting started" checklist

### Figure 2. Literature Search Process

Note that the content of the Value of academic libraries report focuses on library value within the context of overarching institutions (Oakleaf: 26). It does not attempt to address methods for assessing library value within a library context. Therefore, the literature search omitted literature that emphasized measures of internal library processes, such as inputs and outputs, satisfaction, and service quality approaches. These measures are of great utility to librarians who manage library

services and resources, but they tend not to resonate with institutional decision makers as well as outcomes-based, mission-focused approaches.

### THE REPORT

The final Value of academic libraries report is a multi-part document. It begins with a Forward written by Lisa Janicke Hinchliffe (current ACRL President) and Mary Ellen Davis (ACRL Executive Director) explaining the rationale for the report and situating it within ACRL's previous and future efforts to convey academic library value. This is followed by an Executive Summary outlining the purpose and scope of the report and describing twenty-two "next steps" that academic libraries can take to demonstrate their value (Oakleaf: 12-17). In summary, these steps comprise the following actions:

- Define outcomes. Libraries cannot demonstrate institutional value to
  maximum effect until they define outcomes of institutional relevance
  and then measure the degree to which they assist in attaining them.
  Academic librarians can establish, assess, and link academic library
  outcomes to institutional outcomes related to the following areas:
  student enrollment, student retention and graduation rates, student
  success, student achievement, student learning, student engagement,
  faculty research productivity, faculty teaching, service, and overarching
  institutional quality. Each of these institutional outcomes is explored in
  depth in the full version of the report.
- 2. Create or adopt systems for assessment management. Assessment management systems help librarians manage their outcomes, record and maintain data on each outcome, facilitate connections to similar outcomes throughout an institution, and generate reports. Because assessment management systems aggregate data by outcomes, they can demonstrate how well the library is contributing to the mission of its overarching institution. Assessment management systems can be developed by individual libraries or institutions or there are commercially produced assessment management systems available for purchase.
- 3. Determine what libraries enable students, faculty, student affairs professionals, administrators, and staff to do. Librarians can conduct "help" studies that collect information about the impact libraries have on their target audiences. Librarians can also explore existing products that enable libraries to collect information from users (eg., how they use library resources) like ARL's MINES for Libraries©. Results from these investigations can help demonstrate library value and provide essential information for continuing improvements to library services and resources.
- 4. Develop systems to collect data on individual library user behavior, while maintaining privacy. In order to determine the impact of library interactions on users, libraries can collect data on how individual users engage with library resources and services. Currently, most libraries do not maintain records on individual users' behavior; consequently,

onal decision

It begins with int) and Mary or the report vey academic g the purpose hat academic immary, these

onal value to nal relevance taining them. demic library lowing areas: rates, student engagement, d overarching is explored in

- t. Assessment tomes, record ons to similar orts. Because atcomes, they o the mission ystems can be commercially urchase.
- tudent affairs s can conduct libraries have sting products (eg., how they Results from and provide

user behavior, pact of library idividual users most libraries consequently,

brary services

they cannot easily correlate behaviours with the outcomes of those behaviours. For example, they do not track data that would provide evidence that students who engage in more library instruction are more likely to graduate on time or that faculty who use library services are more likely to earn tenure or obtain funding. Of course, any such data systems need to protect the privacy of individuals by following appropriate and ethical practices in the maintenance of such records.

- Record and increase library impact on student enrollment. Institutions of higher education want to admit the strongest possible students at both the undergraduate and graduate levels for a variety of reasons; entering student class characteristics are major predictors of institutional rank, prestige, graduation, alumni donations, and other positive markers. At least one study indicates that libraries are an important consideration when students select a university or college, and, as a result, academic libraries can help institutional admissions boost enrollment. Certainly, librarians at many institutions take part in campus wide recruiting and orientation efforts. However, in the future, libraries could play a more prominent role in reaching key prospective student groups and communicating the ways in which librarians can help students attain academic success. Libraries can assign incoming students to librarians as "research advisors" and provide just-in-time and just-for-you assistance based on students' enrollment records or individual characteristics. Such services could target both students of great need and of great potential, thereby helping institutions attract and retain students.
- 6. Link libraries to increased student retention and graduation rates. Most retention and graduation studies have focused on explanations for student persistence or departure, either due to personal characteristics or institutional practices. Because most librarians are not in positions that enable them to influence students' personal traits, they should 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 and embrace early intervention strategies; these practices and strategies are described in detail in the full report.
- 7. Enhance library contribution to student job success. Libraries support students' ability to do well in internships, secure job placements, earn salaries, gain acceptance to graduate/professional schools, and acquire marketable skills. Although it may be difficult to make direct and clear connections between academic libraries and students' educational and professional futures, these outcomes are of critical importance to institutions and their stakeholders. Consequently, librarians can investigate the linkages between academic libraries and student job success, and—if no linkages currently exist—librarians can form them. For example, many 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.
- 8. Track library influences on increased student achievement represented by test scores and grade averages. Libraries support student achievement, and librarians can demonstrate this impact by investigating correlations between student library interactions and their GPA as well as conducting test item audits of major professional/educational tests to determine correlations between library services or resources and specific test items.
- 9. Demonstrate and develop library impact on student learning outcomes. Librarians have long taught and assessed information literacy, but most of the published evidence of the impact of libraries on student learning is sporadic, disconnected, and focused on limited case studies. To effectively establish the role of libraries in student learning, systematic, coherent, and connected evidence is required. The best learning assessments are authentic, integrated, performance assessments focused on campus learning outcomes including information literacy. Capturing such assessments in assessment management systems provides the structure necessary to establish a clear picture of academic library contributions to student learning.
- 10. Review course content, readings, reserves, and assignments. Librarians can use course information to identify students who have had substantial library exposure and compare them to those who have not; track the integration of library resources into the teaching and learning processes of their institution; and answer questions such as: "What percent of readings used in courses or co-curricular activities are available and accessed through the library? What contributions do they make to student learning? How many assignments do students complete that require use of information skills? What do library services and resources enable students to do or do better? Are faculty assessing these skills in their own ways, and if so, what have they learned about student skill levels?"
- 11. Document and augment library advancement of student engagement, experiences, attitudes, and perceptions of quality. In the United States, national 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 community college, college, or university library on student experiences. In addition, librarians can continue to work to develop library-related questions for these national surveys as well as local institutional surveys, especially those aimed at graduating seniors and alumni.
- Track and increase library contributions to faculty research productivity.
   Librarians contribute to faculty research productivity in a number of

profiles,

esented ement, dations ducting ermine titems.

comes. It most carning les. To ematic, carning locused pruring les the

library

rarians stantial ack the ocesses tent of ole and take to te that sources te skills student

ement, States, student oraries. ated to mation library work to well as seniors

ictivity. iber of

braries

ways. To some degree, librarians have investigated the impact of library resources on faculty productivity, but librarians can further explore the linkages between library services and faculty research productivity. How do librarians serve faculty who are preparing publications, presentations, or patent applications? How do librarians help faculty prepare their tenure and promotion packages? Fortunately, surrogates for faculty research productivity are well established; the challenge for librarians is to collect data on those surrogates for individual faculty and correlate them to faculty behavior and library characteristics.

- 13. Investigate library impact on faculty grant proposals and funding, a means of generating institutional income. Librarians contribute to faculty grant proposals in a number of ways. Recent studies included in the *Value of Academic Libraries* report have documented the contribution of library resources to citations in grant applications. In addition, academic librarians can investigate other ways in which libraries contribute to the preparation of grant proposals.
- 14. Demonstrate and improve library support of faculty teaching. Librarians contribute to faculty teaching in a variety of ways. Librarians provide guest lectures and online tutorials; integrate library resources into course materials on a massive scale; collaborate with faculty on curriculum, assignment, and assessment design; and provide resources that cover the scholarship of teaching and learning; some libraries also partner in campus wide teaching and learning support centers. Librarians clearly support teaching; now librarians can also collect the data and communicate the value of that support.
- 15. Record library contributions to overall institutional reputation and prestige. Academic libraries can augment their institution's reputation and prestige in at least four ways. First, they can help department chairs to recruit faculty or retain them. Traditionally, libraries contribute to faculty recruitment 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 their 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. Third, library special collections can bring significant prestige to their institutions. Finally, library services and resources support institutional engagement in service to their communities locally, nationally, and globally, thus contributing to their institution's reputation and prestige through service.
- 16. Participate in higher education assessment initiatives. Librarians can familiarize themselves with national movements. In the United States, examples include the Voluntary System of Accountability (VSA), the Voluntary Framework of Accountability (VFA), the University and

V8

res

- College Accountability Network (U-CAN), and the National Institute for Learning Outcomes Assessment (NILOA). Librarians would also do well to stay up to date on international efforts such as Assessment of Higher Education Learning Outcomes (AHELO).
- 17. Engage in higher education accreditation processes. Librarians can prepare for and participate in institutional accreditation efforts in their own institutions. They may also engage in accreditation processes at a higher level, perhaps working to increase the integration of information literacy concepts into regional accreditation guidelines.
- 18. Appoint liaison librarians to support senior institutional leadership and/or offices of assessment or institutional research. Providing top-notch information services to key decision makers can help overarching institutions achieve a culture of assessment and evidence. This practice can also make library value less abstract and, over time, indispensible.
- 19. Create library assessment plans. Librarians can develop detailed plans that organise assessment efforts, keep them on track, and record assessment results and lessons learned. These assessment plans can be integrated into library budget, strategic planning, and reward systems.
- 20. Promote and participate in professional development. Librarians learning to demonstrate their value require training and support to acquire new skills. Their attendance at existing assessment professional development opportunities, such as the ARL Library Assessment Conference, the ACRL Assessment Immersion program, the Indiana University-Purdue University Indianapolis (IUPUI) Assessment Institute, or other higher education assessment venues, can be encouraged and supported. In some cases, inviting consultants, participating in webinars, and establishing assessment resource collections are required to update librarian skills.
- 21. Mobilize library administrators. Library administrators can help their libraries demonstrate value by taking a number of actions: communicating assessment needs and results to library stakeholders; using evidence-based decision making; creating confidence in library assessment efforts; dedicating assessment personnel and training; fostering environments that encourage creativity and risk taking; integrating library assessment within library planning, budget, and reward structures; and ensuring that assessment efforts have necessary resources.
- 22. Leverage library professional associations. Major library professional associations can play a crucial organizing role in the effort to demonstrate library value. First, they can create online support resources and communities to serve as a nexus of value demonstration activities. Second, they can serve a "pulse taking" role, learning how member libraries are showing value and communicating this information to the membership. Third, they can orchestrate an "all hands on deck" approach to assessment, helping librarians determine which part of the

al Institute would also essment of

rarians can orts in their ocesses at a aformation

leadership viding topverarching us practice pensible.

p detailed and record ans can be 1 systems.

Librarians support to rofessional Assessment te Indiana it Institute, raged and webinars, to update

help their nunicating evidenceent efforts; ironments assessment I ensuring

rofessional monstrate urces and activities. v member mation to on deck" part of the Research Agenda might be best suited to their institutions and ensuring that the agenda is covered. Fourth, they can encourage library-centric publications and conferences to index their work in library and education literature databases. Finally, they can identify expert researchers and grant-funding opportunities that can partner with librarians to take on the most challenging aspects of the Research Agenda.

The body of the report defines several dimensions of library value (Oakleaf: 20) and then summarizes the existing literature about academic, school, public, and special library value. The academic library section describes the expectations of higher education stakeholders, suggests a reconceptualisation of academic libraries, and posits that library value resides in the library's role in achieving institutional missions and outcomes (Oakleaf: 26-30). It also presents literature reviews focusing on library value in the contexts of student retention, engagement, and learning; faculty teaching and research; library financial valuation; accreditation; and assessment management systems.

The academic library section is followed by relevant professional knowledge from three other library domains. First, the school library section focuses on the concept of evidence-based practice, describes the wide variety of assessment tools used in school libraries, summarizes the well known "state studies" that investigate the impact of school libraries on student learning (Oakleaf: 65-68), and highlights probable future developments in school library value research. Second, the public library section is characterized by a focus on economic value. Public libraries have an extensive history of using "return-on-investment" methodologies for estimating the financial value of public library funding; this body of research is summarized with an emphasis on techniques that could be applied to academic library valuation as well. Third, the special library section describes the lessons learned in the special library domain. Because special library value studies employ both impact models "What is the library's impact on the user?" and economic models "What money has the library made or saved its overarching institution?", this body of literature is of particular interest to academic librarians pursuing the same two conceptions of library value.

The last segment of the body of the report includes suggestions for improving the articulation and demonstration of library value (Oakleaf: 94-101); this section may have the most interest for practicing academic librarians who seek to make practical and significant changes to increase the value of their libraries. While these suggestions are included in the Executive Summary, they are fleshed out in detail in this section of the report.

Next, the report details the Research Agenda for future academic library value research. This Research Agenda focuses on ten areas:

- Student enrollment
- Student retention
- Student success (career measures)
- Student achievement (grades and test scores)

- Student learning (outcomes)
- · Student experience, attitude, and perception of quality
- Faculty research productivity
- Faculty grants
- Faculty teaching
- · Institutional reputation or prestige

Each area of the Research Agenda lists the essential research question, describes surrogates for library value, suggests sources for data, and charts possible areas of correlation (Oakleaf: 102-140). Thus, the Research Agenda is rife with ideas for practicing librarians, library school students, and library science faculty to investigate in the ongoing effort to demonstrate academic library value. Indeed, the future of academic library value research depends on librarians, students, and faculty engaging this Research Agenda, determining which part of the Agenda might be best suited to their institutions, partnering with colleagues with complementary skill sets, and pursuing the demonstration of academic library value. The author also reminds readers that the main way to work towards a positive future for academic libraries is to "engage in the demonstration of library value, recognizing that the process is not one of proving value, but rather continuously increasing value...[and remembering that] the demonstration of value is not about looking valuable; it's about being valuable" (Oakleaf: 141).

Finally, the report offers a bibliography of over 500 resources, a shorter list of "must read" resources, and a value checklist that practicing librarians will find a manageable first task toward demonstrating the value of their own library.

### THE FUTURE

In the coming months and years, ACRL plans to continue the Value of Academic Libraries initiative through the development of a toolkit (http://www.ala.org/ala/mgrps/divs/acrl/issues/value/valueofacademiclibrariestoolkit.cfm) and a series of professional development presentations and panels (http://www.acrl. ala.org/value/?page\_id=39). ACRL has also pursued a series of connections with higher education organizations including (the Association of Institutional Researchers, the Council of Independent Colleges, and the Association of Public and Land-Grant Universities); together they have collaborated to develop a grant proposal currently under review at the Institute of Museum and Library Services (IMLS). Furthermore, ACRL has positioned the Value of Academic Libraries initiative as the cornerstone of their new Plan for Excellence (http://www.ala.org/ala/mgrps/divs/acrl/about/whatisacrl/strategicplan/ACRL\_draft\_SP\_Dec10.pdf). By doing so, ACRL seeks to help librarians use existing research to articulate the value of academic libraries as well as engage in new research as detailed in the Research Agenda of the Report.

The author invites librarians who seek to join the research effort to identify themselves, share their ideas, and/or contribute online via the Value of Academic

Libraries blog (http://www.acrl.ala.org/value/?m=all). All are welcome to participate—there is a role in the academic library value agenda for everyone.

### **NOTES**

- 1. Arum, Richard, & Josipa Roska. 2010. Academically adrift: limited learning on college campuses. Chicago: University of Chicago.
- 2. Oakleaf, Megan. 2010. The value of academic libraries: A comprehensive research review and report. Chicago: Association of College and Research Libraries.

lescribes ole areas ath ideas aculty to Indeed, tudents, of the ues with a library towards ation of the trather ation of .41).

r list of ll find a y.

ademic la.org/ and a vw.acri. ections utional Public a grant ervices braries ww.ala. ft\_SP\_ esearch arch as

dentify demic

oraries