

# **Evidence Based Library and Information Practice**

# Conference Paper

# "What's So Special about Special Collections?" Or, Assessing the Value Special Collections Bring to Academic Libraries

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#### **Abstract**

**Objective** – The objective of this study was to examine and call attention to the current deficiency in standardized performance measures and usage metrics suited to assessing the value and impact of special collections and archives and their contributions to the mission of academic research libraries and to suggest possible approaches to overcoming the deficiency.

Methods – The authors reviewed attempts over the past dozen years by the Association of Research Libraries (ARL) and the Association of College and Research Libraries (ACRL) to highlight the unique types of value that special collections and archival resources contribute to academic research libraries. They also examined the results of a large survey of special collections and archives conducted by OCLC Research in 2010. In addition, they investigated efforts by the Society of American Archivists (SAA) dating back to the 1940s to define standardized metrics for gathering and comparing data about archival operations. Finding that the library and archival communities have thus far failed to develop and adopt common metrics and methods for gathering data about the

activities of special collections and archives, the authors explored the potential benefits of borrowing concepts for developing user-centered value propositions and metrics from the business community.

**Results** – This study found that there has been a lack of consensus and precision concerning the definition of "special collections" and the value propositions they offer, and that most attempts have been limited in their usefulness because they were collections-centric. The study likewise reaffirmed a lack of consensus regarding how to define and measure basic operations performed by special collections and archives, such as circulating materials to users in supervised reading rooms. The review of concepts and metrics for assessing value in the business community, however, suggested new approaches to defining metrics that may be more successful.

Conclusion – The authors recommend shifting from collection-centric to user-centric approaches and identifying appropriately precise metrics that can be consistently and widely applied to facilitate cross-institutional comparisons. Adopting a user-centric perspective, they argue, will provide a broader picture of how scholars interact with special collections at different points in the research process, both inside and outside of supervised reading rooms, as well as how undergraduate students change their thinking about evidence through interaction with primary sources. They authors outline the potential benefits of substituting the commonly used "reader-day" metric for tabulating reading room visits with a "reader-hour" metric and correlating it with item usage data in order to gauge the intensity of reading room use. They also discuss the potential benefits of assessing impact of instructional outreach in special collections and archives through measures of student confidence in pursuing research projects that involve primary sources.

#### Introduction

What's so special about special collections? What kinds of value do they contribute to the overall mission of academic libraries and their parent institutions in terms of support for research, teaching, and learning? How should we measure return on the immense investment that it takes to maintain their secure, climate-controlled facilities, provide salaries and wages for staff, and support the various costs associated with acquiring, processing, and preserving rare and unique materials? How should we measure value and assess impact?

"What's So Special about Special Collections?" was the title chosen for the inaugural issue of the Association of College and Research Libraries (ACRL) journal *RBM*: A Journal of Rare

Books, Manuscripts and Cultural Heritage, which appeared in spring 2000. Although the most frequent answer to the question in that issue was the collections themselves (Boyd, 2000; de Hamel, 2000), some articles also pointed to the distinctive qualities of special collections researchers (Howarth, 2000) and staff and their interactions (Katchen, 2000). The same title was also used for a special section of an issue of American Libraries (2000) that highlighted several collections as well as collaborative collecting projects.

In June 2001, the Association of Research Libraries (ARL) held a working symposium on the future of special collections in research libraries at Brown University (Association of Research Libraries, 2001; Hewitt & Panitch, 2003). This led to the creation of an ARL task force charged with engaging the agenda that emerged from the symposium. Following the task force's final report (Association of Research Libraries, 2006), a new ARL special collections working group was assembled and given a charge that included "contributing to the work underway within ARL to develop qualitative and quantitative measures for the evaluation of special collections" (Association of Research Libraries, 2010b). In October 2009, ARL partnered with the Coalition for Networked Information (CNI) to host a two-day forum on special collections, "An Age of Discovery: Distinctive Collections in the Digital Age," which opened with a panel session titled "Why Are Special Collections so Important? Exploring the Value Proposition of Special Collections" (Association of Research Libraries, 2009a). Participants at the forum focused on expanding the research potential and value of special collections through the creation of virtual collections of digitized materials. Nichols (2009) explored various aspects of this issue, taking up both the utilitarian argument that special collections do not deserve support unless they are widely used, as well as the scholarly perspective that digitization represents a natural evolution which promises to keep the collections alive through new (if not yet fully discovered) transformative uses.

In January 2010, ARL announced that it was collaborating in a three-year IMLS grant-funded study titled "Value, Outcomes, and Return on Investment of Academic Libraries (Lib-Value)," the aim of which is to "enrich, expand, test, and implement methodologies measuring the return on investment (ROI) in academic libraries" (Association of Research Libraries, 2010a). Whether or how this study will address special collections is not yet known, but it seems worthwhile to suggest some possible areas of engagement, especially because library

discourse around value propositions appears to have reached a critical juncture.

#### **Value Propositions for Special Collections**

Defining customer-oriented value propositions emerged as a business strategy in the early 2000s. In business parlance, a "value proposition is an analysis and quantified review of the benefits, costs, and value that an organization can deliver to customers and other constituent groups within and outside of the organization" (Value Proposition, 2012; Barnes, Blake, & Pinder 2009, p. 28). As we have noted, value propositions for special collections – although they have not often been labeled as such typically have been framed around inherent features of the collections themselves or their use by scholars. Summarizing these viewpoints, Waters (2009) stated at the ARL-CNI symposium:

At its most simplistic, the value proposition for special collections is that scholarship broadly across fields in the humanities, social sciences, and the sciences just cannot proceed without corollary investment in the acquisitions and carrying costs of the primary source evidence needed to sustain and advance those scholarly fields. (Waters, 2009, p. 32)

Others, meanwhile, have attempted to articulate the value of special collections in terms of their impact upon a wide range of functions and indicators. These include not only contributions to research and the creation of new knowledge, but also their usefulness for teaching and learning (particularly through the development of critical thinking skills), and even the enhancement of an institution's reputation and prestige – the latter being a function highlighted by Koda (2008) but implicitly critiqued by Waters (2009).

## Measuring and Assessing Value

Although the special collections and archives communities by and large have not attempted to articulate explicit value propositions, they have engaged in various efforts to define collection and usage metrics.

The metrics movement in the archival community dates back to the 1960s, when the Society of American Archivists established a Committee on Uniform Archival Statistics. Its functions were:

To collect and analyze information about existing archival statistical systems with a view towards (a) isolating and describing these aspects of archival activity which are measurable, i.e., can be expresses in numerical terms; (b) defining these characteristics with a precision that will eliminate confusion wherever a particular term is used; (c) developing standards for archival statistics that will permit meaningful comparisons and studies of archival institutions throughout the country; and (d) encouraging general adoption of these standards by archival agencies. (Campbell, 1967)

Unfortunately, no statistical standards for measuring processing activities or usage emerged from this early effort or other subsequent attempts within the archival community, with the possible exception of the Archival Metrics Project (n.d.), whose userbased evaluation tools for evaluating the quality of archival services and facilities are beginning to see some adoption (Duff et al., 2010). Meanwhile, the topic has been emerging in the special collections community, as evidenced, for example, by sessions held at recent ACRL Rare Books and Manuscripts Section (RBMS) preconferences, for example, the presentations given at the 2009 RBMS preconference seminar on "Public Services and 'Un-Hidden'

Collections" (Schreyer, Schaffner, Bowen, & Steele, 2009).

A pressing need for special collections and archival metrics therefore remains, as witnessed by the report that OCLC Research has published concerning its 2010 survey of special collections and archives in 275 academic and research libraries throughout the United States and Canada. The most comprehensive and detailed investigation of its kind to date, the study builds upon the "Exposing Hidden Collections" survey conducted by Panitch (2001) in 1998. Report authors Dooley and Luce remark that their findings "convey how difficult it is to evaluate data usefully without standard metrics in use across the special collections community. We cannot demonstrate the level of value delivered to primary constituencies, unless we can reliably characterize our users" (2010, p. 35) - and, we would add, their use.

While recurrent interest in both metrics and values has been expressed in the special collections and archival communities for some time, little traction thus far has been gained by efforts to define and operationalize the momentum.

## A Stalemate

We are thus faced with a stalemate. On the one hand, academic libraries have been focusing renewed attention on special collections over the past decade based on an assumption that rare and uniquely held materials will serve to distinguish research libraries as they rapidly move into a future in which their core collections and services will be constituted by a commonly held array of licensed content and other distributed electronic resources. On the other hand, special collections have done little either to articulate their distinctive value or identify metrics that demonstrate how they have been contributing to the mission of their parent institutions and the larger academic enterprise they serve. At the same time, the uniqueness of special collections vis-à-vis main library

collections has been disputed (Lavoie, Connaway, & Dempsey, 2005). And yet, turning the uniqueness argument on its head, Waters (2009) – like Nichols (2009) – has argued that the value proposition for special collections is enhanced through digitization and the resultant opportunities to perform cross-collection analyses and comparisons.

Despite these disconnects, special collections have been producing relevant value on an increasing scale. In addition to pursuing a range of digitization activities, special collections librarians and archivists have also been working diligently to bring primary resources into the classroom to support teaching and learning. The 2010 ARL SPEC Kit survey on "Special Collections Engagement" documents the greater levels of effort that special collections have been putting into instructional outreach, exhibits, and public programs in recent years. Nevertheless, the otherwise encouraging report admits that "institutions feel they are not able to quantify the success of their efforts, and this in turn limits the ability to compare activities within the institution or across institutions, to plan further outreach effectively, or to communicate the results of those outreach activities to the larger special collections community" (Berenbak et al., 2010, pp. 16-17).

It seems evident that the inability of institutions to quantify their successes, let alone describe them qualitatively, stems from a lack of standardized metrics for measuring special collections usage and or even commonly agreed-upon values. Following are some perspectives and practical proposals that we hope will prove helpful in surmounting the current impasse.

#### **Approaching Definitions**

One problem that immediately arises in trying to identify either the value proposition or appropriate metrics for special collections is defining just what one means by "special collections." This is typically done with reference to the collections themselves, and

includes a list of materials formats and qualifiers concerning rarity and uniqueness and sometimes age and physical vulnerability. For instance, the 2003 ARL statement of principles *Research Libraries and the Commitment to Special Collections* takes this approach. According to this statement, special collections

comprise manuscripts and archival collections unduplicated elsewhere and one-of-a-kind or rarely held books. They also include items precious through their rarity, monetary value, or their association with important figures or institutions in history, culture, politics, sciences, or the arts. Special collections extend beyond paper to other formats of cultural significance, for example photographs, moving pictures, architectural drawings, and digital archives. Special collections are also significant for their focused assemblages of published materials so comprehensive as to constitute unparalleled opportunities for scholarship. (Association of Research Libraries, 2003, n.p.)

The 2009 report on Special Collections in ARL Libraries pursued a decidedly different definitional course and identified special collections as "any kind of vehicle for information and communication that lacks readily available and standardized classification schemes, and any that is vulnerable to destruction or disappearance without special treatment" (Association of Research Libraries, Working Group on Special Collections, 2009).

These approaches reflect and perpetuate varying degrees of ambiguity. They both also reflect a collections-centric approach. Might it be possible and perhaps more useful to take a user-centric approach, especially when it comes to defining value? Doing so would likely lead us to a different set of metrics and different algorithms for assessing quantitatively and qualitatively the values derived from special collections. By

adopting a user-centric perspective, we may be able to look more broadly at how scholars interact with special collections at different points in the research process, both inside and outside of supervised reading rooms, as well as how undergraduate students change their thinking about evidence through interaction with primary sources.

Values and metrics converge and diverge in various ways across the spectrum of library services. While collections that are used in a controlled reading room or staff-mediated situation are typically described as "noncirculating," this is an imprecise and unhelpful term when it comes to defining metrics. It is, in fact, perfectly appropriate to refer to the process of requesting, consulting, and returning special collections materials in a reading room environment as "circulation" for the metaphor and processes it represents are essentially the same as those employed for the circulation of materials from open stacks in the main library. The only substantial difference is that the user is not allowed to remove the materials from a defined location. Likewise, just as raw circulation counts can serve as a basic indicator of the frequency of the use of main library collections, so, too, they can provide a similar index of special collections usage. Thus, a welldefined circulation metric for special collections and archives could also contribute toward a goal of integrating them more fully into the operational perspectives of their parent institutions (Whittaker, 2008).

Taking another tack, speedier circulation in special collections could help researchers work more efficiently and perhaps also more effectively by reducing lag times between requesting and receiving materials and the associated disruptions to study and concentration. Accordingly, retrieval time could constitute a benchmark metric for special collections library service that could be correlated with increased scholarly productivity – an important component of the special collections value proposition, as we have seen

above. In fact, the National Archives (United Kingdom) closely monitors retrieval times using its internal electronic paging system to meet its goal of fulfilling all requests within twenty minutes or less (D. Priest, personal communication, December 8, 2010).

Yet these types of linkages between circulation metrics and end-user values are not currently possible beyond the confines of individual institutions because there is no generally accepted definition for counting many of the types of materials that are found in special collections. Although it is not difficult in principle to apply common standards for counting the use of published print materials, such as books and serials, where a count of circulated volume units is the established norm (Association of Research Libraries, 2009b; International Organization for Standardization, 2008), there is no standard or best practice for tabulating the usage of collections of unpublished manuscripts and archives. Special collections repositories that include university archives or otherwise function as archives tend to count circulation use at the box or container level. By contrast, special collections whose strengths lie in historical and literary manuscripts tend to count circulation use at the folder or even individual item level. Some special collections that include both manuscript and archival collections apply a multiplier to circulation counts of archival boxes - thus, a single box may be tallied as representing 250-500 items if it is a 5-inch wide document case or even a thousand items if it is a full-size record storage container. Such extreme variations in practice tend to render circulation figures for special collections rather meaningless, even for the special collections librarians who collect them.

Another factor that complicates and skews circulation counts for special collections is the concept of a visit. ARL statistics follow the definition and methodology prescribed by the NISO Z39.7 standard for calculating visits, which is an averaged gate count over a typical

week (National Information Standards Organization, n.d.). Special collections libraries and archives, on the other hand, typically require their users to complete a registration form and present some type of identity document as a general security precaution before admitting them to the reading room. The registration record, or another system, such as a daily sign-in sheet, is also often used to track the date and time of the user's visits and occasionally the materials consulted during each visit.

Special collections libraries that track the materials consulted during each visit generally tabulate the use of the same item on different days as distinct circulation counts, whereas other repositories count only the first time the item is requested, especially if they base their count on the number of callslips submitted rather than the number of times the item is actually delivered to the researcher in the reading room. Obviously, this divergence in practice results in statistical counts that cannot be used for cross-institutional comparisons.

To compensate for this lack of consistency, some institutions employ a "reader-day" metric that considers simply the total number of visits per month or per year. This type of broad metric has its shortcomings as well. For instance, a visit by a local user who requests one volume and looks at it for ten minutes is given equal weight to a visit by a professional scholar who has traveled from across the ocean to look at a cartful of material and who spends every moment the reading room is open doing so. Likewise, the metric itself does not readily tell us how many unique visitors have used the reading room or how many days on average the typical user has stayed.

## **Taking Flight**

To overcome this last defect, it would be enough to apply a more precise measure. Looking at the basic metrics other industries have developed to measure their business performance can be instructive. For example, two basic metrics that the airline industry uses to measure overall business capacity and volume are "available seat-miles" (ASMs), which is equal to the number of available seats multiplied by the number of miles flown, and "revenue passengermiles" (RPMs), which equals the number of filled seats multiplied by the number of miles flown. Dividing RPM by ASM yields a third metric, "load factor," which represents the percentage of airline seating capacity that is actually used (Massachusetts Institute of Technology, Global Airline Industry Program, n.d.). Because these metrics are simple in concept and can be equally and objectively applied across all airline companies, they are useful for assessing the performance of individual airlines from quarter to quarter, comparing the respective performance of multiple airlines over a single quarter, and benchmarking the overall performance of the industry over time.

Although special collections reading rooms are seldom arranged or oriented to calculating seating availability or measuring their performance as a quotient of seats filled, it may be useful to consider adopting a measurement strategy akin to revenue passenger-miles in order to enable libraries to engage in meaningful longitudinal and comparative assessments. As shown above, the reader-day metric fails to adequately convey the amount of time that researchers actually spend in the reading room. It also does not take into account differences in reading room schedule. If a reading room is open for four hours on a Saturday afternoon should that be considered equivalent to a weekday when the reading room is open for six or eight or ten hours? Most special collections that employ a reader-day metric do in fact treat all of these as equivalent, which is to say that they consider a "day" to be any day when they maintain at least some reading room hours.

Taking a lesson from the airlines, these shortcomings could be remedied by simply refining the basic reader-day metric to instead count reader-hours. Just as airlines use seatmiles rather than, say, seat-segments to gauge capacity and profitability, so, too, special collections libraries could achieve a more precise, consistent, and objective measure of their use by counting the actual hours that researchers spend in the reading room.

And it would not be hard to do. To facilitate the tabulation and calculation, the manual tally sheets and reading room logs that most special collections employ to track usage could be replaced with simple electronic databases that staff would use to record the time that researchers enter and leave the reading room. If the log also linked visits with individual researchers, reports could be constructed to calculate the number of unique visitors during a given time period and analyses of the average visit lengths of various categories of users (such as students, faculty members, visiting scholars, and members of the general public). Visitors could even be given "smart" cards to scan upon entry and exit, like those the National Archives and Records Administration has begun issuing at some of its research facilities.

Furthermore, reader-hour data could be correlated with circulation or item usage data to provide a kind of "load factor" indicator of reading room use. How many items, on average, do various categories of researchers consult when they visit the reading room? To facilitate basic comparisons, it would be enough to divide the total number of items used during a given time period by the total number of reader-hours.

Having precise metrics and consistent data collection methods would enable managers to assess the adequacy of their services and staffing over time. Are special collections reading rooms in fact getting busier as evidence from some libraries, largely anecdotal, would suggest? Have changes in policy, such as allowing researchers to use personal digital cameras in the reading room, had an effect on the way researchers are using their time in the reading room? Are researchers spending less time in

reading rooms because they can now come in and make their own digital copies at no charge and then consult these copies at home on their own time? Or is the opposite occurring: because it is now quicker and easier to obtain copies, are more researchers spending more time in the reading room and requesting more materials?

The impact of such changes in policy and practice on researchers and staff alike is potentially significant and therefore should be assessed. How else will libraries be able to make informed decisions about service delivery and staffing unless they have reliable measures and data to guide them? Yet such assessments are not currently possible because special collections have yet to define and employ adequate metrics and data collection methods. In an unpublished study, Yakel and Goldman (2002) found that although all repositories have at least some mechanisms for data collection and there are some commonalities in the kinds of statistics collected, there are fundamental differences in the reasons why archives and special collections amass data, how they collect it, and what they do with it. These differences have persisted for a long time and have previously prevented standardization and circumscribed what can be done with this information. The interview data from the study also revealed the limitations of current data collection methods.

In terms of value, a corollary concept that could extend the application of reader-hours and load factor metrics is "intensity of use," an idea introduced by Miller. In his study, Miller (1986) proposed four levels of intensity: incidental use, substantive use, important use, and fundamental use. Miller based his analysis on seven data elements pertaining to characteristics of the resource consulted and the nature of the citation. Goggin (1986) similarly attempted to demonstrate the value of collection through usage by examining callslips and citations to materials from the Library of Congress. These early attempts to understand the impact of special collections on scholarship have not been followed up in more recent years even though

methods of citation analysis and visualizations of scholarly networks have become more sophisticated.

The interplay between metrics and values can also be demonstrated by looking at how archives and special collections support the teaching mission of the university. Special collections generally collect data on the number of instructional sessions presented to visiting classes and the numbers of local students who use the reading room. Nevertheless, as the ARL SPEC Kit survey on "Special Collections Engagement" cited above has shown, repositories have struggled to assess the impact of special collections on learning outcomes (Berenbak et al., 2010).

The impact is potentially large. In the final beta testing of the Archival Metrics Project (n.d.) "Student Researcher Questionnaire" in 11 classes at two universities, we found that 92% (n=444) of the students enrolled in these courses had never used archives or special collections before. Ninety-six percent said that they would return if they had another project that would benefit from the use of primary sources (Daniels & Yakel, in press). Although one of the primary arguments levied against special collections has been that their collections are esoteric and outreach insignificant, these findings indicate that much value can be gained from having undergraduates engage with special collections.

The Archival Metrics project along with other studies by Duff and Cherry (2008) and Krause (2010) provide further options for demonstrating the impact of special collections and archives on student learning. Duff and Cherry measured the effect of archival orientation programs on student confidence in undertaking archival research. The Archival Metrics "Student Researcher Questionnaire" was similarly designed to measure confidence and also asks whether skills learned as a part of archival assignments are transferrable to other courses. Krause (2010) conducted a large-scale field experiment to gauge the effect of archival

instruction. Her results showed that such instruction helps students develop their critical thinking about evidence. A wider diffusion of these and other evaluation and impact measures are needed to more fully understand the value of special collections to higher education.

#### Discussion

Special collections and archives can and do contribute unique value to research and learning, but their value has not been effectively communicated due to a lack of standards and best practices for measuring and assessing their impact. Although past efforts to define and operationalize special collections and archival metrics have not met with much success, the current focus of research libraries on value propositions and return on investment provides a new opportunity to remedy the deficiency. As we have shown with our proposal for a readerhour metric, some solutions may only require identifying appropriately precise variations of existing measures that can be applied objectively and universally. In other cases, the solution may simply involve making wider use of available tools, such as the Archival Metrics user surveys.

The key in every case is to define metrics and assessment techniques that are user-centric, that is, defined around user perceptions and demonstrations of impact on the user. In 1997, Saracevic and Kantor introduced the idea of a user-centered approach concentrating on the impact of library service, which they called "value as results" or "value in use" (p. 540). In The Value of Academic Libraries, Oakleaf expands on this concept and argues for the importance of demonstrating value-on-investment measures that show impact or the differences that libraries make in the lives of their users (2010). Creating an identifiable link between the value proposition and demonstrated value for the user also needs to be done for special collections and archives. Quantitative approaches that measure intensity of use offer one possibility, while qualitative interview and sampling techniques offer another. Chapman and Yakel have

observed that although neither value nor impact "can be determined solely by quantitative means, operational metrics can be structured to better support research into value propositions and impact" (2012, p. 149). They have likewise elaborated a rationale for making better use of operational data collected by special collections and archives reading rooms by highlighting several successful case studies. Nevertheless, they have also recognized, like Dooley and Luce (2010), that "[t]he absence of data definitions makes it difficult for repositories to model and collect data in a coherent and consistent way over time" (p. 150). To address this deficiency and the need to formulate more appropriate usage metrics for special collections, RBMS formed a Metrics and Assessment Task Force in July 2011 and charged it with "examining current practices for gathering and reporting information to demonstrate the value and impact of special collections and archives" (Association of College and Research Libraries, Rare Books and Manuscripts Section, 2011). The task force will provide a report and initial set of recommendations to the RBMS Executive Committee by June 2013, including the identification of specific guidelines and best practices that should be developed to support meaningful assessment activities. In the meantime, Dupont (2012) has served as guest editor of special issue of RBM: A Journal of Rare Books, Manuscripts and Cultural Heritage devoted to assessment in special collections and archives. The goal of defining usage metrics for special collections and archives at academic institutions is ultimately to better assess and articulate their value propositions in the context of the rapidly evolving landscape of research libraries.

### References

American Libraries. (2000). What's so special about special collections? [Special section]. *American Libraries*, 31(7).

Archival Metrics Project. (n.d.). Retrieved 24 May 2013 from http://archivalmetrics.org

Association of College and Research Libraries,
Rare Books and Manuscripts Section.
(2011). Metrics and assessment task
force. Retrieved 24 May 2013 from
http://
http://www.rbms.info/committees/task
force/metrics\_assessment/

Association of Research Libraries. (2001).

Building on strength: Developing an ARL agenda for special collections.

Program and Selected Presentations,
June 27, 2001, John Hay Library, Brown University. Retrieved 18 Mar. 2013 from www.arl.org/storage/documents/public ations/building-on-strength-developing-an-arl-agenda-for-special-collections-june2001.pdf

Association of Research Libraries. (2003).

Research libraries and the commitment to special collections. Washington, DC:
Association of Research Libraries.
Retrieved 18 Mar. 2013 from http://www.arl.org/storage/documents/publications/special-collections-statement-of-principles-2003.pdf

Association of Research Libraries. (2006). Special collections task force final report.

Washington, DC: Association of Research Libraries. Retrieved 18 Mar. 2013 from http://www.arl.org/storage/documents/publications/special-collections-task-force-final-status-report-july2006.pdf

Association of Research Libraries. (2009a). An age of discovery: Distinctive collections in the digital age. Proceedings of the ARL-CNI Fall Forum, October 14–15, 2009, Washington, DC. Retrieved 27 May 2013 from <a href="http://www.arl.org/publications-">http://www.arl.org/publications-</a>

resources/searchpublications/search/summary?term[0]=1
7&term[1]=&term[2]=&term[3]=73&term
[4][]=103

- Association of Research Libraries. (2009b). *ARL*statistics questionnaire, 2008-09:
  Instructions for completing the
  questionnaire. Washington, DC:
  Association of Research Libraries.
  Retrieved 27 May 2013 from
  <a href="http://www.libqual.org/documents/admin/09instruct.pdf">http://www.libqual.org/documents/admin/09instruct.pdf</a>
- Association of Research Libraries. (2010a). ARL partners in grant to study value of academic libraries [Press release].

  Retrieved 29 May. 2013 from <a href="http://www.arl.org/news/arl-news/2747-arl-partners-in-grant-to-study-value-of-academic-libraries">http://www.arl.org/news/arl-news/2747-arl-partners-in-grant-to-study-value-of-academic-libraries</a>
- Association of Research Libraries. (2010b).

  Transforming special collections in the digital age working group [Working group charge]. Retrieved 24 May 2013 from

  <a href="http://www.arl.org/storage/documents/publications/scwg-charge-final-11feb10.pdf">http://www.arl.org/storage/documents/publications/scwg-charge-final-11feb10.pdf</a>
- Association of Research Libraries, Working
  Group on Special Collections. (2009).

  Special collections in ARL libraries: A
  discussion report. Washington, DC:
  Association of Research Libraries.
  Retrieved 24 May 2013 from
  <a href="http://www.arl.org/storage/documents/publications/scwg-report-mar09.pdf">http://www.arl.org/storage/documents/publications/scwg-report-mar09.pdf</a>
- Barnes, C., Blake, H., & David Pinder, D. (2009).

  Creating and delivering your value
  proposition: Managing customer experience
  for profit. London & Philadelphia: Kogan
  Page.
- Berenbak, A., Putirskis, C., O'Gara, G., Ruswick, C., Cullinan, D., Dodson, J. A., Walters,

- E., & and Brown, K. (2010). Special collections engagement [ARL SPEC Kit 317]. Retrieved 24 May 2013 from <a href="http://www.arl.org/news/pr/spec317-august10.shtml">http://www.arl.org/news/pr/spec317-august10.shtml</a>
- Boyd, B. (2000). Serendipity of the new. *RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage,* 1(1), 36-37.
- Campbell, E. G. (1967, April 9). [Letter to Philip P. Mason]. University of Wisconsin-Milwaukee, Archives and Special Collections (Collection RG 200/01/06, Box 1, Folder 56: Society of American Archivists Records, President, Herbert E. Angel, Uniform Archival Statistics, 1966-67).
- Chapman, J. & Yakel, E., (2012). Data-driven management and interoperable metrics for special collections and archives user services. *RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage,* 13(2), 129-151.
- Daniels, M. G., & Yakel, E. (in press).

  Uncovering impact: The influence of archives on student learning. *Journal of Academic Librarianship*.
- de Hamel, C. (2000). Tangible artifacts, *RBM*: *A*Journal of Rare Books, Manuscripts, and

  Cultural Heritage, 1(1), 27-29.
- Dooley, J. M., & Luce, K. (2010). *Taking our pulse: The OCLC Research survey of special collections and archives*. Dublin, OH:

  OCLC Research. Retrieved 24 May 2013

  from

  <a href="http://www.oclc.org/research/publications/library/2010/2010-11.pdf">http://www.oclc.org/research/publications/library/2010/2010-11.pdf</a>
- Duff, W. and Cherry, J. (2008) Archival orientation for undergraduate students: An exploratory study of impact. *American Archivist*, 71(2), 499-530.

- Duff, W., Yakel, E., Tibbo H., Cherry, J., Krause, M., & Sheffield, R. (2010). The development, testing, and evaluation of the Archival Metrics Toolkits. *American Archivist*, 73(2), 569-599.
- Dupont, C. (Ed.). (2012). Assessment in special collections and archives. [Special issue]. *RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage, 13*(2). Retrieved 24 May 2013 from <a href="http://rbm.acrl.org/content/13/2.toc">http://rbm.acrl.org/content/13/2.toc</a>
- Goggin, J. (1986). The indirect approach: A study of scholarly users of black and women's organizational records in the Library of Congress Manuscript Division.

  Midwestern Archivist, 11(1): 57-67.
- Hewitt, J. A., & Panitch, J. M. (2003). The ARL special collections initiative. *Library Trends*, 52(1), 157-171.
- Howarth, R. (2000). What's the use? *RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage,* 1(1), 42-43.
- International Organization for Standardization. (2008). ISO 11620:2008, Information and documentation: Library performance indicators. Available from <a href="http://www.iso.org/iso/catalogue\_detail.htm?csnumber=37853">http://www.iso.org/iso/catalogue\_detail.htm?csnumber=37853</a>
- Katchen, M. (2000). Archiving the avant-garde. *RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage,* 1(1), 38-41.
- Koda, Paul S. (2008). The past is more than prologue: Special collections assume central role in historical research and redefine research library collections. *Library Quarterly*, 78(4), 473-482.
- Krause, M. (2010). Undergraduates in the archives: Using an assessment rubric to measure learning. *American Archivist*,

- 73(2), 507-534. Retrieved 24 May 2013 from <a href="http://archivists.metapress.com/content/72176h742v20l115/">http://archivists.metapress.com/content/72176h742v20l115/</a>
- Lavoie, B. F., Connaway, L. S., & Dempsey, L. (2005). Anatomy of aggregate collections: The example of Google Print for libraries. *D-Lib Magazine*, 11(9). Retrieved 24 May 2013 from <a href="http://www.dlib.org/dlib/september05/lavoie/09lavoie.html">http://www.dlib.org/dlib/september05/lavoie/09lavoie.html</a>
- Massachusetts Institute of Technology, Global
  Airline Industry Program. (n.d.). *Airline data project: Glossary*. Retrieved 24 May 2013 from
  <a href="http://web.mit.edu/airlinedata/www/Resultanamous.com/">http://web.mit.edu/airlinedata/www/Resultanamous.com/</a>
- Miller, F. (1986). Use, appraisal, and research: A case study of social history. *American Archivist*, 49(4), 371-392.
- National Information Standards Organization.
  (n.d.). NISO Z39.7-201X, Information
  services and use: Metrics & statistics for
  libraries and information providers—Data
  dictionary. Retrieved 24 May 2013, from
  <a href="http://www.niso.org/dictionary/appendices/appendixa">http://www.niso.org/dictionary/appendices/appendixa</a>
- Nichols, S. G. (2009). Why special collections matter now more than ever before. Paper presented at ARL-CNI 2009 Fall Forum. Washington, DC: Association of Research Libraries. Retrieved 29 May 2013 from <a href="http://www.arl.org/storage/documents/publications/ff09-nichols.mp3">http://www.arl.org/storage/documents/publications/ff09-nichols.mp3</a>
- Oakleaf, M. (2010). The value of academic libraries:

  A comprehensive research review and
  report. Chicago: Association of College
  and Research Libraries. Retrieved 29
  May 2013 from
  <a href="http://www.ala.org/ala/mgrps/divs/acrl/issues/value/val\_report.pdf">http://www.ala.org/ala/mgrps/divs/acrl/issues/value/val\_report.pdf</a>

- Panitch, J. M. (2001). Special collections in ARL libraries: Results of the 1998 survey sponsored by the ARL Research Collections Committee. Washington, DC: Association of Research Libraries.
- Saracevic, T., & Kantor, P. B. (1997). Studying the value of library and information services; Part I: Establishing a theoretical framework. *Journal of the American Society for Information Science*, 48(6), 527-542.
- Schreyer, A., Schaffner, J., Bowen, S. & Steele, V. (2009). Public services and 'un-hidden' collections: What we know and what we need to know. Panel presentation at the 2009 Preconference of the Rare Books and Manuscripts Section of the Association of College & Research Libraries, Charlottesville, Virginia, 17-20 June 2009. Retrieved 24 May 2013 from <a href="http://www.rbms.info/conferences/preconfdocs/2009/2009docs.shtml">http://www.rbms.info/conferences/preconfdocs/2009/2009docs.shtml</a>

- Value proposition. (2012). In *Wikipedia, The free*encyclopedia. Retrieved 4 Dec. 2012 from
  <a href="http://en.wikipedia.org/w/index.php?title=Value\_proposition&oldid=556435992">http://en.wikipedia.org/w/index.php?title=Value\_proposition&oldid=556435992</a>
- Waters, D. (2009). The changing role of special collections in scholarly communications. *Research Library Issues*, 267(3). Retrieved 29 May 2013 from <a href="http://publications.arl.org/rli267/31">http://publications.arl.org/rli267/31</a>
- Whittaker, B. M. (2008). Using circulation systems for special collections: Tracking usage, promoting the collection, and addressing the backlogs. *College and Research Libraries*, 69(1), 28-35. Retrieved 24 May 2013 from <a href="http://crl.acrl.org/content/69/1/28.full.pdf">http://crl.acrl.org/content/69/1/28.full.pdf</a>
- Yakel, E., & Goldman, E. (2002). Archival metrics:

  An overview of current practices.

  Unpublished manuscript.