REPORTS FROM THE FIELD

A Review of the Literature on Assessment in Academic and Research Libraries, 2005 to August 2011

Jon R. Hufford

Introduction

Assessment in United States higher education has become very important in recent years. Virtually all colleges and universities are now striving to prove through empirical evidence that they are committed to improving student learning. Created in late 2005, the US Department of Education’s Commission on the Future of Higher Education was charged with the task of “developing a strategy for higher education to meet the needs of America’s population and address the economic and workforce needs of the future.” The Commission’s final report, *A Test of Leadership: Charting the Future of United States Higher Education*, makes several recommendations for reform and states in a summary that “improved accountability is vital to ensuring the success of all the other reforms we propose. Colleges and universities must become more transparent about cost, price, and student success outcomes, and must willingly share this information with students and families.” Though the report was not an early wake-up call for assessment, since articles on the need and importance of assessment in higher education had been published in the literature before 2006, it was an important document on the topic from a political and administrative perspective and has had a significant impact on campuses across the nation. This is because, in response to the Commission’s report, the regional accreditation organizations made changes in their standards, and these changes have been directly responsible for the trend toward assessment. As might be expected, some of the standards of several of these regional organizations relate to academic libraries and have changed the way they are assessed.

This article reviews the literature on assessment in academic and research libraries that has been published since the Commission on the Future of Higher Education was created in 2005 and up until August 2011. Much has been written about assessment
over the years. The author felt that coverage of the literature of the most recent six years would include sources that would still be reasonably relevant for academic professionals in 2011. The author was also interested in providing an examination of the coverage since the Commission’s report to disclose new developments, ideas, and directions in the assessment of academic and research libraries. Also, to offer a competent and manageable review of the literature, the article focuses on assessments concerned with the management or administration of libraries and their collections, public services, and issues or projects affecting more than one department within a library. Assessments in the acquisitions and technical services areas have been excluded.

The author’s goal was to treat the topic comprehensively. However, some sources were not considered significant enough to be included, and it is possible that other sources that perhaps should have been included were inadvertently left out. A representative selection of noteworthy older monographs and textbooks generally recognized for their contribution to academic and research library assessment has been included, along with a selection of publications on assessment in higher education that provides a more comprehensive perspective of the topic. Though the majority of the sources reviewed in this article were published in the United States and cover developments in the United States, some sources published in international or foreign publications that cover developments in the United Kingdom, Canada, Australia, or South Africa were included because they discuss developments similar to those taking place in American academic and research libraries and provide important insights into the topic.

Assessment is often equated with evaluation. To education professionals, assessment occurs when a researcher wants to discover what a student knows or can do, while evaluation is used to determine the value of a course or program. Authors of books focused on academic and research libraries normally use evaluation when they discuss the measurement (or evaluation) of a library’s operations and services. In *The Measurement and Evaluation of Library Services*, F.W. Lancaster explains in his definition of evaluation that it “consists of the comparison of performance with the objectives of the agency, in order to determine (a) whether there has been any change in performance for a given time period, (b) if so, whether the change is in the desired direction, and (c), if so, to what extent.” On the other hand, in the Association of Research Libraries’ *SPEC Kit 303: Library Assessment*, Stephanie Wright and Lynda White state that “to assess, in general, is to determine the importance, size, or value of; to evaluate. Library staff assess operations by collecting, interpreting, and using data to make decisions and to improve customer service. They study internal processes, levels and quality of service, and library impact on institutional goals.” These two quotations, both from reputable publications in the library profession, indicate that the use of the words assessment and evaluation among librarians is sometimes ambiguous, or has changed over the years. Given the ambiguity, the author of this article decided to use in his analyses of sources the word that is found in the source being described. This explains why assessment is used in some paragraphs and evaluation in others. When not analyzing particular sources, assessment is generally used and is meant to embrace learning assessment as well as evaluation (or assessment) of academic or research library operations and services.

The author searched several databases using the keywords “academic libraries” or “research libraries” and “assessment” or “evaluation.” User surveys employed in
library and information science ascertain the characteristics of information users and their behavior. As a category, they include more than studies that concentrate on assessing or evaluating. Materials on user studies are included in this article if their purpose was to assess. The databases searched included Web of Science; the FirstSearch databases ArticleFirst, Dissertations, Ebooks, ECO, ERIC, PapersFirst, Proceedings, Periodical Abstracts, WilsonSelectPlus, and WorldCat; the Wilson databases Library Literature and Information Science and OmniFile Full Text Mega; and the EBSCO databases Academic Search Complete, Education Research Complete, and Library, Information Science, and Technology Abstracts.

Several types of publications were examined for inclusion in the article, including articles, conference papers, monographs, textbooks, reports, websites, and dissertations. The sources reviewed are organized under broad topics, and at the beginning of each of these topical groupings the author has identified those sources that are more significant than the rest. In a couple of cases papers from the proceedings of a conference are treated together even though they are on different topics. Within each topic the sources are grouped by type of publication. They are organized within these groups by date of publication in reverse chronological order. The subject content of several of the sources is not conducive to arrangement in categories. The author therefore decided not to use topical subdivisions within the broad topics.

Some Noteworthy Works Published Before 2005

In previous decades input and output assessment played the major role in evaluating academic and research libraries. Data representing an institution’s input (for example, number of books purchased, journals subscribed to, and tables and chairs available in study spaces) and output (such as, number of books circulated and interlibrary loan requests processed) was an important component in an annual report. However, in recent years impact or outcomes assessment, in particular student learning-outcomes assessment, has played a much more important role in library assessment. This is reflected in the fact that much of the literature on library assessment over the past ten years or more is about measuring service quality using instruments such as LIBQUAL+™ and student learning outcomes in information literacy classes and sessions.

Though this change in emphasis has taken place, input and output measurement is still performed. A significant number of academic and research libraries submit annual reports to the entities they report to, and these reports still include input and output data. For this reason the author believes it is worthwhile pointing out a handful of significant books published before 2005 that have gained notoriety and that provide insight into the past status of library assessment. Several are textbooks examining research methods that the authors deemed useful for students in library schools, but also for practicing librarians. It may be argued that much of the basic methodology they cover and the
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terminology used are still relevant or may again become relevant at some time in the future. The content of most of these books is applicable to all types of libraries, though one covers the measurement of just academic libraries.

F. Wilfrid Lancaster is responsible for perhaps the most recognized of these earlier publications. With the assistance of Mary Jane Jancich, Lancaster authored *The Measurement and Evaluation of Library Services* in 1977. He and Sharon Baker authored a second edition in 1991. The first edition received the American Library Association’s Ralph Shaw Award in 1978. Both editions of the work were intended primarily as a survey and synthesis of the literature on evaluation, though the second edition was also meant to serve as a practical guide to the evaluation of libraries, including the services they offer their users. Also, the second edition does not limit coverage to just studies done at academic libraries as the first edition did, but covers studies done at public, school, and special libraries as well. Chapters in both editions examine collection evaluation from both the materials perspective and the user’s perspective, the evaluation of in-house use, the availability of materials, catalog use, and the reference services involved in answering questions and searching databases.

Lancaster also authored a work titled *If You Want to Evaluate Your Library …*. A first edition was published in 1988, and another in 1993. The 1988 edition received the American Library Association’s G.K. Hall Award in 1989. This work complemented rather than duplicated the content of *The Measurement and Evaluation of Library Services*. Both editions were meant to be used as textbooks for teaching the subject in library schools and as a practical guide for practicing librarians in the selection of evaluation procedures to use at their libraries. The focus is on public services. While they review the literature on library evaluation they do not do so in a comprehensive manner. The second edition contains an additional chapter on the evaluation of bibliographic instruction and another on continuous quality control applied to library services. Also, evaluations using “cost-effectiveness, cost-benefit, and resource-sharing” methods are treated more thoroughly than in the first edition.

Peter Hernon and Charles McClure had already published books on the evaluation of library services prior to the publication of *Evaluation and Library Decision Making* in 1990. However, this work treats the subject of library assessment more comprehensively than any of their earlier publications. What’s more, Hernon and McClure maintain in their preface to this book that, since no previously published textbook focused on the entire evaluation process from the perspective of libraries, their book filled a void. The authors’ purpose in writing this book was “to assist librarians, library school students, and public officials in understanding evaluation as a research activity and the relationship between evaluation and planning.” Among other things, the book reviews the literature on evaluation, the steps involved in conducting a study, performance measures, reporting a study’s findings, and possible political barriers to the implementation of evaluation research. Two chapters (10 and 11) include examples of evaluation studies undertaken at academic libraries. *Evaluation and Library Decision Making* complements two earlier publications in the Ablex Publishing Corporation’s series “Information Management, Policy, and Services” that Hernon co-authored with others—*Statistics for Library Decision Making* and *Microcomputer Software for Performing Statistical Analysis*. The former discusses the application of descriptive and inferential statistics and the latter explains how librarians can perform statistical analyses on microcomputers.
The American Library Association was responsible for the publication in 1990 of another of these noteworthy works published before 2005, entitled *Measuring Academic Library Performance: a Practical Approach*. Authors Nancy Van House, Beth Weil, and Charles McClure worked under the guidance of the Association of College and Research Libraries’ Ad Hoc Committee on Performance Measures. The book was designed to serve as a practical manual of output measures useful in evaluating the effectiveness of a library’s performance. It covers measures relevant only to public services. The authors maintain in their preface that the measures could be used in all types and sizes of academic and research libraries, are easy to apply and use, inexpensive to administer, support decision-making, are user oriented, and reflect common library goals and objectives. The authors’ purpose in writing the manual was “to promote the use of measurement for management decision-making in academic and research libraries.” Measurements for classroom instruction were not included.

Assessment in Higher Education

A number of publications on assessment in higher education published since 2005 have significantly influenced the way academic and research libraries are now being assessed. Student learning outcomes assessment gets substantial coverage in these publications. Perhaps the most important of them is the report issued in 2006 by the Commission on the Future of Higher Education that is discussed in the introduction to this article.

Another significant and influential report was issued by the Council of Higher Education Management Associations (CHEMA) and the EDUCAUSE Center for Applied Research in 2006. It discloses the results of a Delphi study that used a survey distributed to the members of the boards of directors of each member association and interviews conducted with representatives of each association. CHEMA’s purpose in undertaking this study was to identify forces for change and to better understand their implications for higher education. CHEMA intended to add by way of the report the “voice of higher education’s administrative leadership to those who are seeking to understand and shape the future of higher education.” The report concluded that “heightened competition, changing revenue streams, demographics, technology, and altered public perceptions are creating serious threats and opportunities for higher education.” It also played a role in nurturing the movement in support of outcomes assessment.

Revisiting Outcomes Assessment in Higher Education, published in 2006 and authored by Peter Hernon, Robert Dugan, and Candy Schwartz, complements Hernon and Dugan’s earlier publication *Outcomes Assessment in Higher Education* published in 2004. Both include contributions from various groups and individuals involved in higher education, including members of accreditation organizations, an academic vice president, deans, a higher education consultant, faculty members, and librarians. Each contributor sheds light on how his segment of higher education views and facilitates outcomes assessment. A resource important because it offers up-to-date information on outcomes assessment in higher education is the Council for the Advancement of Standards in Higher Education (CAS)’s website. The Council is a “consortium of professional associations concerned with the development and promulgation of professional standards and guidelines for student support programs and services in institutions of higher education.”
Assessing Academic and Research Libraries

The sources discussed in this section that made significant contributions to the literature on the assessment of academic and research libraries include the Association of College and Research Libraries’ The Value of Academic Libraries: A comprehensive Research Review and Report, the Association of Research Libraries’ SPEC Kit 303: Library Assessment, the Council on Library and Information Resources’ No Brief Candle: Reconceiving Research Libraries for the 21st Century, and the article authored by Steve Hiller, Martha Kyrillidou, and Jim Self that reports on assessment in North American research libraries. The papers presented at the Library Assessment Conference held in Baltimore in 2010 and subsequently published in a special issue of Library Quarterly are also worth reading, in particular the one by Stephen Town.

In 2010, the Association of College and Research Libraries (ACRL) inaugurated its Value of Academic Libraries Initiative to assist academic librarians in participating in the conversations taking place on the campuses of universities and colleges and in government circles about assessment, accountability, and value and to identify resources to support them in demonstrating the value of academic libraries. The Value of Academic Libraries: A Comprehensive Research Review and Report, researched by Megan Oakleaf and published online in September 2010 by ACRL, provides librarians a review of the literature on the value of libraries in an institutional context, suggestions for steps to take to demonstrate an academic library’s value, and a research agenda for the topic. Furthermore, this important resource reviews several assessment “perspectives,” including student learning outcomes assessment. It encourages librarians to adapt these perspectives to their library’s circumstances. Another product of the Initiative is a toolkit developed by the ACRL Assessment Committee that provides academic librarians with tools and examples to use. ACRL also plans to create more opportunities for academic librarians to develop assessment and research skills and to secure funds to implement the research agenda discussed in the report.15

In their book Surviving the Future: Academic Libraries, Quality, and Assessment, Gail Munde and Kenneth Marks provide information that academic librarians can use to
improve the quality of the services at their institutions. Their goal in writing this book was to provide a “thorough, logical, and integrated view of academic library assessment, evaluation, and quality improvement.” Another book edited by Janet Hurlbert and published in 2008 focuses on providing assistance to college library managers in planning for the many directions they must consider and act upon to keep their libraries viable. Several authors contributed to the book’s content. Some of the chapters include studies and models that can be replicated. The volume is meant to be used as a guide for strategic planning.

Joseph Matthews authored two monographs on academic library assessment in 2007. *Library Assessment in Higher Education* provides information on research and the best assessment practices from a university’s perspective as well as an academic library’s perspective. It also provides a set of assessment tools useful for academic librarians generally. On the other hand, his other monograph—*The Evaluation and Measurement of Library Services*—was written for library administrators of all types of libraries interested in assessing library services. It was also intended to be used by library school students. Matthews argues in this volume for the adoption of broader and more rigorous evaluation techniques, including traditional internal measurements as well as more customer-oriented measurements. In addition, the Association of Research Libraries’ SPEC Kit 303: *Library Assessment* published in 2007 provides both an overview of how library assessment activities have been developed and implemented in recent years and assistance in assessing where a library is in relation to its peer institutions and identifying best practices to help build or expand programs.

The Council on Library and Information Resources’ publication *No Brief Candle: Reconceiving Research Libraries for the 21st Century* includes eight essays, presented at a symposium held in Washington, DC, and several recommendations. In its general summary of the essays and the discussions held at the symposium, the report posits the point of view that librarians must exercise “aggressive intervention” to better manage the challenges research libraries are facing. It demands change and offers a broad research agenda that entails, among many other things, assessment at all levels including student learning outcomes assessment.

Another response to the campus conversations on assessment, accountability, and value materialized as the Library Assessment Conference held in Baltimore in October, 2010, and sponsored by the Association of Research Libraries, the University of Virginia Library, and the University of Washington Libraries. The five keynote speakers at the Conference prepared papers that were published in a special issue of *Library Quarterly* in January 2011. In the first of these articles, Fred Heath reviews the demands for accountability and the progress made in recent years. His focus is on the work the Association of Research Libraries and others have accomplished in support of library assessment. Danuta Nitecki’s contribution offers a framework for considering different factors affect-
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Megan Oakleaf explains in her article in this special issue of *Library Quarterly* that libraries are moving beyond the assessment of individual learning outcomes to larger scale value assessment that measures a library’s impact on its university or college. She examines questions relevant to the assessment challenges librarians face as they demonstrate the library’s impact on institutions of higher education. These questions are “(1) How committed are librarians to student learning? (2) What do librarians want students to learn? (3) How do librarians document student learning? (4) How committed are librarians to their own learning? (5) What do librarians need to learn? (6) How can librarians document their own learning?” After answering these questions, Oakleaf concludes with the observation that librarians involved in information literacy instruction should use impact maps and assessment plans to assist them in demonstrating that the student learning-outcome goals for the courses and sessions they are teaching intersect with their university or college outcome goals, or with accreditation needs, goals, outcomes, and standards. She believes that assessment management software will facilitate the accomplishment of this effort.

Joseph Matthews examines the challenges involved in demonstrating organizational effectiveness and the role of performance measures as a way of demonstrating effectiveness. In the final article of the January 2011 special issue of *Library Quarterly*, Stephen Town examines the belief that libraries must prove their worth and points out that, if this belief is valid, library leaders may not be achieving this goal satisfactorily. He suggests that in the future proof of a library’s worth should be measured by what higher order beneficial effects libraries provide and that evaluation using current performance frames of reference are insufficient. He would like to see a “new, higher order framework for evaluation and performance measurement based on a values scorecard.”

Gail Staines reports in an article published in *Library Management* in 2009 on research she had undertaken to determine the level of an academic library’s strategic credibility by discovering whether the library’s strategic planning goals and annual reports were in alignment. She analyzed the strategic plans and annual reports of 28 randomly selected institutions belonging to the Association of Research Libraries. Her research found that the majority of the libraries in the study produced strategic plans. However, because most of those libraries no longer produced annual reports, Staines found that determining whether ARL libraries had strategic credibility was problematic. Interestingly, her study did reveal that Canadian ARL libraries included in the study tended to have strategic plans that were user-centered, whereas United States ARL libraries tended to have plans that focused on “hot topics.”

Martha Kyrillidou and Colleen Cook review the development of measurement and evaluation in academic and research libraries in an article published in 2008. They review the topic from the perspectives of three individuals who significantly influenced library assessment activities over the years, James Gerould, F. Wilfrid Lancaster, and Duane Webster. Maria Pinto writes about library service charters in 2008. Quality issues reported in the professional literature were used as resources in developing a checklist. The checklist
was used to assess randomly selected service charters. The project disclosed that many of the academic library service charters studied needed considerable improvement.28

Several papers on various aspects of academic and research library assessment are included in the Proceedings of the 2008 Library Assessment Conference held in Seattle. Steve Hiller and Stephanie Wright examine how assessment information has been used to make changes in North American academic research libraries.29 The information came from two Association of Research Libraries resources—the *Making Library Assessment Work/Effective, Sustainable, and Practical Assessment* service and *SPEC Kit 303: Library Assessment*.30 The authors review the assessment methods used by both resources to acquire the information and the changes or improvements made by the libraries as a result of the information. In another paper in the Proceedings, Stephanie Brasley, Penny Beile, and Irv Katz discuss use of the iSkills assessment tool in several assessment projects that were conducted throughout the California State University (CSU) system and at the University of Central Florida (UCF). The iSkills tool is a product of the collaborative efforts of academic librarians across the United States and therefore reflects a national perspective of information literacy competence. The authors address iSkills’ purpose and development, and explain how the CSU system and UCF used iSkills to assess student learning and instructional competence. Also in the *Proceedings* is a paper by Leslie Bussert, Sue Phelps, and Karen Diller that examines two assessment projects—one undertaken at the University of Washington at Bothell and Cascadia Community College and the other at Washington State University at Vancouver—involving authentic assessment instruments. The data collected by these instruments helped identify ways to improve the quality of information literacy learning and instruction. The projects’ findings have also assisted in improving librarian, faculty, and administrator collaboration, institutional development, and program planning on the campuses.31

In an article published in 2007, Larry White and Emily Blankenship discuss the benefits of integrating and aligning assessment process components, and that doing so will improve an academic library’s effectiveness. The authors explain that the components include assessment, capacity, stakeholders, participation, technology, and organizational leadership. They maintain that “libraries that can effectively align their assessment processes to the service environment in which they operate will be more successful in demonstrating and reporting assessment of their organizational performance.”32 Amos Lakos writes about the use of data in library decision-making and specifically about the role of library leaders in encouraging evidence-based decisions in another article published in 2007. He explains that developments in information technology, especially the growth of large networked infrastructures, digitization projects, and collaboration along with economic and market trends, have the potential to greatly increase the use of data analysis by library management. The article includes discussion of several new products and services designed to assist decision-makers and also interviews with over twenty library directors.33

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The iSkills tool is a product of the collaborative efforts of academic librarians across the United States and therefore reflects a national perspective of information literacy competence.
In an effort to determine how the adequacy of library budgets might be assessed, Frank Allen and Mark Dickie examine whether a relationship between academic library funding and certain institutional factors could indicate demand for library services. The factors include enrollment, number of doctoral programs, doctoral degrees awarded, and number of faculty. The authors evaluated eleven years of longitudinal data from 113 ARL libraries. The study’s results revealed that the indicators of demand for library services were in fact positively associated with funding. The authors maintain that the study’s methodology may be useful as a tool in determining an appropriate level of library funding and for assessing a library budget’s adequacy.

Ronald Powell provides an overview of evaluation research in an article published in the summer 2006 issue of *Library Trends*. The article first examines the reasons for conducting evaluation research and then reviews the principles and types of research. Several evaluation methods are examined, including “input measurement, output/performance measurement, impact/outcomes assessment, service quality assessment, process evaluation, benchmarking, standards, quantitative methods, qualitative methods, cost analysis, organizational effectiveness, and program evaluation methods.” The steps involved in planning and conducting a study are discussed along with the measurement process, statistics, and data collection techniques. In addition, the article includes a review of data analysis and the evaluation report.

Cost accounting methods can be used to make better decisions about what library services to offer users according to Roswitha Poll. In an article published in 2006, she defines cost accounting and points out the difference between it and the traditional statistics of income and expenses. She maintains that “by knowing the cost of specific tasks or services and comparing those costs with similar services offered by other institutions, the library can better judge what services should be offered.” She also avers that cost accounting should always support a library’s mission, goals, and strategic planning.

Another article authored by Poll along with Philip Payne provides an overview of impact (a.k.a. outcomes) research and a selection of project experiences illustrates this kind of research. The authors state that impact research can be employed to prove that use of library services positively influenced users. They go on to point out that “benefits from library services can be assessed in terms of knowledge gained, greater information literacy, greater academic or professional success, or increases in individual well-being,” and conclude that, since existing methods are inadequate for measuring influence, new research methods must be developed to show a library’s overall impact.

Hiller, Kyrillidou, and Self grade the progress of research library assessment. Their article reports the results of the first part of a two-year project sponsored by the Association of Research Libraries. The project provides librarians with information they need to make appropriate decisions in selecting and applying measurement techniques and on how to use assessment data in their decision-making. The article supports “moving library assessment from a project-based approach to a more programmatic, integrated,
and sustainable operation within libraries.” Xi Shi and Sarah Levy examine theoretical models used in library assessment activities. Their examination includes a review of the history of library assessment practices and the evolution of the various approaches. The focus is on service quality and user satisfaction.

**LibQUAL+™**

Much has been written about LibQual+™. The Association of Research Libraries has an extensive bibliography of significant papers, presentations, and articles that review employments or analyses of LibQual+™. These publications are well worth reading.

LibQUAL+™ comprises a package of instruments by which libraries can determine their users’ opinions of their service quality, and also market the library. The main instrument is a Web-based survey. LibQUAL+™ began as a research and development project undertaken in 2003 by the Association of Research Libraries (ARL) in collaboration with Texas A&M University and with financial support from the United States Department of Education’s Fund for the Improvement of Postsecondary Education. Libraries that implement the survey can refer to the results when describing their contributions to their institutions. Based on Gap theory, the LibQUAL+™ survey measures library users’ perceptions of service quality and identifies gaps between minimum, desired, and perceived expectations of service. LibQUAL+™ is modeled on SERVQUAL, a service quality assessment tool that was introduced to the commercial sector in 1988 by its authors A. Parasuraman, L.L. Berry, and V.A. Zeitkaml. SERVQUAL began to be employed by libraries in the 1990s.

The authors of two articles also worth reading criticized SERVQUAL and LibQUAL+™ for limitations on the validity of their methods. Liangzhi Yu and others review a study that tested SERVQUAL at three Chinese university libraries. Based on the findings of this study, the authors questioned a number of assumptions that they claim limited SERVQUAL’s ability to yield valid results. They suggest three enhancements to make it more useful as a library assessment tool. William Edgar offers criticism of LibQUAL+™. He describes the LibQUAL+™ survey instrument and its research approach and points out the fundamental assumption on which LibQUAL+™ rests, which is that only users can judge quality. Edgar proposes what he calls a “functional/technical” model for measuring academic library effectiveness that would address what he sees as LibQUAL+™’s shortcomings. This model recognizes that effectiveness also depends on such things as a library’s operations, the groups it serves, the values provided to them, the models for funding libraries, the obligations of academic libraries, and the library users’ need for professional assistance. According to Edgar, “this broader approach provides a basis for demonstrating both immediate and cumulative academic library effectiveness.”
Reports on use of the results of the LibQUAL+™ survey and of follow-up assessments to it can be found in the literature. John Harer describes how small academic libraries may benefit from using LibQUAL+™. He points out that the benefits may vary depending on the size of the library. Melissa Becher and Janice Flug report that, following implementation of the LibQUAL+™ survey at their university library, follow-up assessment took place using three focus group sessions. The authors explain the methodology, implementation, and results of the focus group study. They also describe how the findings of the LibQUAL+™ survey, the focus groups, and other assessment activities were used as resources in their library’s planning and marketing efforts.

Kathleen Miller’s dissertation “Service Quality in Academic Libraries: An Analysis of LibQUAL+™ Scores and Institutional Characteristics” reports the findings of a study that sought to determine whether service quality scores from the LibQUAL+™ instrument were related to the type of institution, size of the institution, or the level of the institution’s investment in its libraries. Data regarding Carnegie classification, FTE enrollment, and library expenditures at 159 colleges and universities participating in the LibQUAL+™ survey of 2006 were examined. Several statistically significant relationships were found, most notably, negative correlations between the LibQUAL+™ scores and total library expenditures. The study’s findings also suggested that higher expectations among library users in large research libraries led to slightly lower LibQUAL+™ scores.

The Digital Revolution

The two Ithaka reports discussed in this section provide important contributions to an understanding of how the digital revolution is affecting academic and research libraries. Also, Transforming Library Service through Information Commons: Case Studies for the Digital Age is well worth reading for insight into how some libraries are using the new technology to transform their services.

The change from older analog technology to digital technology that has been taking place since the early 1980s is often referred to as the digital revolution. The information age is another term used for this period of change. It refers to the sweeping changes brought about by digital computing and communication technology that includes, among other things, the computer, digital cellular phone, and fax machine. Studies have been published that examine the effect of the digital revolution on academic and research libraries.

Ithaka is a nonprofit organization dedicated to helping the academic community use digital technologies to preserve the scholarly record and advance research and teaching. Reports published by Ithaka assist in identifying critical issues facing academe. A recent Ithaka report titled Ithaka S+R Library Survey 2010: Insights from U.S. Academic Library Directors examines a survey of 267 high level library administrators at four-year colleges and universities to determine the strategic direction the administrators were plan-
ning for their libraries. Among several key findings was the belief on the part of most of these administrators that support for research and teaching is very important and that their libraries would experience a continued increase in the amount spent on digital materials and a commensurate decrease for print materials. Also, they expected that by 2015 their libraries will have completed the transition to electronic format for journals acquisitions and at the same time will be spending nearly half their books budget on electronic books.\(^46\) The findings of two large-scale surveys are reported in *Ithaka’s 2006 Studies of Key Stakeholders in the Digital Transformation in Higher Education*. The purpose of the authors, Ross Housewright and Roger Schonfeld, in writing this report was to assist librarians and other information professionals interested in scholarship in the digital age to understand the changing needs of faculty and to encourage thoughtful consideration of how to best serve them in this changing environment. The surveys questioned faculty to find out how they felt about the transition to a digital environment.\(^47\)

A collection of case studies regarding successful programs for information commons development is included in *Transforming Library Service through Information Commons: Case Studies for the Digital Age*. Russell Bailey and Barbara Tierney authored the book, and the American Library Association published it in 2008. The authors saw the information commons as an important aspect of the new digital age, and wrote the book with the expectation that it would be used as a practical guide for encouraging and designing effective change in facilities, informational resources, services, and staff. They identified these selected cases as creations of “intelligent library and information professionals determined to provide access to dynamic, vital, and evolutionary teaching and learning laboratories in their particular iterations of the commons.” Chapter 5 discusses assessment of information commons.\(^48\)

Richard Johnson and Judy Luther authored a 2007 Association of Research Libraries (ARL) report that examines the issues associated with the move toward the digitization of the content of journals. The report is based on information collected during interviews. Among those interviewed were collection development librarians at a dozen ARL libraries. Publishing staff of societies and university presses, publishing platform hosts, and publishing production consultants were also interviewed. The study sought to discover how far the process of changing to digital journal publishing had advanced and to examine perceptions of replacing print with entirely electronic journals.\(^49\)

Lloyd Davidson provides a nice overview of the transformation from print to digital media. He discusses the growth of the Internet, the explosion in the amount of information now available to everyone, and the fundamental changes in institutions that exist for the creation, management, and distribution of information and knowledge. He points out that change brought about by digitization is affecting all components of the scientific enterprise, from personal correspondence and laboratory methods to peer reviewing and the quality assessment of scientific research. The consequence of this revolution threatens long established institutions such as copyright, commercial publishers, scientific societies, and academic libraries, according to Davidson.\(^50\)
Needs Assessment and User Surveys

Two sources, discussed below, provide significant contributions in the areas of needs assessment and user surveys. Char Booth’s report of a large-scale environmental scan done at Ohio University that tested librarian assumptions of what library users wanted to see in new public service technologies by surveying student perceptions and attitudes had important implications for technology development and evaluation for libraries in general. Studying Students: the Undergraduate Research Project at the University of Rochester, by Nancy Foster and Susan Gibbons, introduced to the library profession user studies that involved anthropological and ethnographic methods. Since their report was published in 2007, other academic and research libraries have followed suit and conducted similar studies.

Needs assessment entails a systematic exploration of current and desired conditions in an organization with the goal of improvement. A user survey, on the other hand, is designed to collect information from a targeted population of users on something such as services or resources. Shun Wong and T. Webb describe how Hong Kong Baptist University Library conducted a user survey that established a relationship between students’ library material use and their cumulative grade point average. The study population included 2007 to 2009 graduates. The data collected included grade point averages and library book and audiovisual loans. The authors maintain that analysis of the data revealed the Library’s impact on student learning outcomes. The subjects were grouped into disciplines according to their declared majors at graduation, and, of the 48 groups, 31 (65 percent) showed a positive correlation between grade point average and the number of library loans.

Char Booth, in collaboration with the Ohio University Libraries Technology Team, led a large-scale environmental scanning initiative in the winter and spring of 2008 that investigated the factors motivating student interest in emerging library technologies. In particular, the initiative assessed student library, information, and communication technology use. It consisted of two Web-based surveys, both of which generated strong response rates. By researching student library perceptions in conjunction with their attitudes toward information, communication, and academic tools, Booth and her colleagues hoped to test the assumptions that influenced the Ohio University Libraries’ development of emerging public service technologies. The initiative came about as the result of OU librarians realizing that they needed to understand how students actually interacted with libraries and technology, instead of how librarians assumed that they did. Booth explains in her report of the project how libraries can use collected data to both evaluate and prioritize a range of initiatives. She points out that, though the surveys’
findings are specific to the population and culture of Ohio University Libraries, they offer implications for technology development and evaluation for other libraries as well. She also provides insight into the various types of research, pointing out their strengths and applications in a library context, provides a sample survey instrument template modeled on the surveys used in the OU Libraries scanning initiative, and recommends additional data sources that can inform local research initiatives.

Joanna Bryant, Graham Matthews, and Graham Walton describe a study done at Loughborough University Library (in the United Kingdom) that evaluated the use of an open learning/social space in the Library. The study employed a descriptive ethnographic method to collect data. The data was examined as it related to the themes of “collaborative study, individual study, social space, intrusions and interruptions, use of technology, diversity, library staff/library materials, and spatial organization.”

In an article published in 2008, Kathleen Murray and Inga Hsieh describe a needs assessment study undertaken as part of the Library of Congress-funded Web-at-Risk project. The study was a three-year collaborative research effort on the part of the California Digital Library, the University of North Texas, and New York University to identify the needs and concerns of librarians, curators, end users, and content providers about Web archives. Twenty-two curators, 43 librarians and archivists, seven researchers, and seven content providers participated in activities that included an online survey, focus groups, and interviews. One important outcome of the study was that the participating curators developed a Web archiving service for materials taken mostly from federal and state government agency websites.

A major needs assessment trend over the past five years involved the use of anthropological methods. These methods were introduced into the mainstream of library research in 2007 by the authors Nancy Foster and Susan Gibbons. In Studying Students: The Undergraduate Research Project at the University of Rochester, Foster and Gibbons reported on a research project undertaken by the University of Rochester’s Library that determined what undergraduates “really” do when they research and write their papers. The project’s researchers felt they needed to know more about present-day student research habits, their library-related assignments, and library-related needs in order for librarians to meet the University’s education mission. They therefore decided to develop and employ a study involving anthropological and ethnographic methods that would help them find out what the undergraduates were doing to complete their research paper assignments.

Penn State University’s Visual Image User Study is described in an article by Henry Pisciotta and others that was published in portal: Libraries and the Academy in 2005. The study was a needs assessment of users of pictures at Penn State and of their perceptions. The findings included identification of the potential market for digital images and the factors determining whether an image management system will be used. Also identified were key user requirements for images in teaching, independent learning, and collection management.
Information Literacy

Important sources for information literacy that are discussed in this section include the Middle States Commission on Higher Education’s *Student Learning Assessment: Options and Resources* and *Information Literacy Assessment: Standards-based Tools and Assignments* by Teresa Neely. Also, Megan Oakleaf’s article “The Information Literacy Instruction Assessment Cycle: A Guide for Increasing Student Learning and Improving Librarian Instructional Skills” and John Budd’s article in which he presents an alternative approach to that offered by ACRL’s Information Literacy Competency Standards for Higher Education are important contributions to the literature, and are well worth reading.

Jeremy Shapiro and Shelley Hughes define information literacy as “a new liberal art that extends from knowing how to use computers and access information to critical reflection on the nature of information itself, its social, cultural, and philosophical context and impact.” The Final Report of the American Library Association’s Presidential Committee on Information Literacy, a document that inaugurated information literacy programs in academic and research libraries, states that “to be information literate, a person must be able to recognize when information is needed and has the ability to locate, evaluate, and use effectively the needed information.” In recent years, librarians in academic and research libraries have embraced information literacy instruction as one of the most important services their libraries provide, and much has been published on assessment in this area.

The sources examined in this section, like those in the other sections, are organized by format and within format by date of publication with the most recently published sources treated first. These sources include handbooks, manuals, and guides, either for assessing information literacy programs, courses, and one-shot sessions or assisting in the implementation of accreditation standards. Also included are brief reviews of articles on assessment projects that used pre- and post-surveys, portfolio assignments, grading rubrics, a qualitative instrument for assessing critical reflection, a self-assessment instrument, and one-on-one and focus group interviews. Coverage also includes articles on the assessment cycle, speculations on the future of information literacy, concerns about the inadequacy of the ACRL Information Literacy Competency Standards, an examination of the degree to which the United States regional accreditation organizations have incorporated information literacy into their standards, continuous assessment of a program at multiple times and using several instruments, integrating information literacy into a general education program, information literacy test development, information literacy needs of international students, assessing online syllabi for library skills courses using the ACRL Standards as a framework for categorizing them, and issues relating to government policies and practices that affect information literacy. The section concludes with a brief description of a dissertation that assessed the readiness of graduate students in teacher education to integrate information literacy into their classroom teaching.
The Middle States Commission on Higher Education’s publication *Student Learning Assessment: Options and Resources* exemplifies the efforts of the regional accreditation organizations to encourage the growth of student learning-outcomes assessment in higher education, including in information literacy. The publication is a handbook meant to serve as a resource for universities and colleges needing assistance in implementing the Commission’s standards for accreditation in a campus environment not conducive to assessment and continuous improvement. The handbook clarifies the principles and methods for setting goals for student learning in the context of an institution’s mission. It provides assistance in using the methods chosen by the institution for evaluating the achievement of the goals and in using the information gathered as a resource in the effort toward continuous improvement in student learning. The Middle States Commission on Higher Education recognizes more than most regional accreditation organizations that information literacy has a critical role to play in the process of enhancing student learning, and this position is reflected in the Commission’s standards.69

Handbooks, manuals, and guides for information literacy assessment abound. Assessment of information literacy instruction for particular disciplines has been written about in at least one monograph in recent years. Dorothy Warner authored a book that includes what she refers to as “proposals,” each pertinent to a particular discipline and providing a framework for teaching and assessing student information literacy skills within that discipline. Each proposal includes a cognitive sequence related to the courses of a disciplinary program. The sequence begins with introductory skills and advances to more sophisticated cognitive skills. The learning objectives of the information literacy segments of the courses are adapted from the ACRL Information Literacy Competency Standards for Higher Education, and they serve as the basis for assessing the student learning outcomes.60

In the introductory chapter of a monograph authored in 2007, Carolyn Radcliff and others maintain that their guide gives advice “to academic librarians and others who want to ascertain the information literacy levels of their students.” The guide is designed for librarians and administrators who want to undertake assessment either for an entire institution, a program, or a one-shot instructional session. A significant portion of the guide covers nine assessment tools. Each tool segment includes explanations, definitions, required resources, instructions, and examples.61

Carol Y. Neely, author of *Information Literacy Assessment: Standards-based Tools and Assignments*, envisions her book as a guide for building a culture of information literacy assessment at all levels of teaching, including one-shot sessions, credit courses, and programs. The book emphasizes the importance of using uniform criteria for assessing the information literacy skills of college and university students. Also, Neely maintains that the book uses the ACRL Information Literacy Competency Standards for Higher Education as “a framework for developing and implementing an information literacy research agenda.”62 Another resource belonging to the category of handbooks, manuals, and guides is *Creating a Comprehensive Information Literacy Plan: A How-To-Do-It-Manual and CD-ROM for Librarians*, published in 2005. Included in its overall discussion on creating a plan are segments dealing with assessment.63

Several articles have reported on projects that assessed information literacy instruction at the program, course, or session level since 2005. Yu-Hui Chen and Mary Van Ullen
analyze the results of assessments of workshops on the research process and plagiarism given to international students at the University of Albany. The assessments included pre- and post-tests and interviews of the students several months after the workshops were given. The authors assert the assessments revealed that the students significantly improved their understanding of the research process and plagiarism by attending the workshops, and continued to apply new skills months later.  

Jon Hufford writes about the experience gained by librarians at Texas Tech University Libraries while developing and implementing pre- and post-assessment surveys administered in eleven sections of a library research course taught in the fall of 2008. In addition, he and Arlene Paschel authored an article reporting the results of pre- and post-surveys administered in the distance learning section of the same course taught in the fall of 2009. The assessments’ findings were used to improve both the content and the teaching of the course. Brian Winterman writes about how he, biology researchers, and professors collaborated in developing a course to teach biology undergraduates information literacy skills applicable to the research process. Pre- and post-assessment surveys were administered to seventeen students (fourteen seniors and three juniors) to determine the impact of the course during its pilot phase. A majority of the students showed improvement in information literacy skills.

In an article published in 2009, Megan Oakleaf describes the seven stages of the Information Literacy Instruction Assessment Cycle (ILIAC) and uses an assignment as an example to show how ILIAC provides a process for improving librarian teaching skills and student information literacy skills. The seven stages are: reviewing learning goals, identifying learning outcomes, creating learning activities, enacting learning activities, gathering data to check learning, interpreting data, and enacting decisions.

Laura Saunders has written about the present and future state of information literacy. She maintains that technological advances and changes in the information needs and expectations of library users are impacting information literacy programs. The article discusses the results of a survey of thirteen experts who were asked to respond to proposed futures for information literacy over the next decade. Though generally optimistic about its future, the experts saw obstacles that academic librarians involved in instruction will face. One concern expressed was that, though librarians will have greater opportunities to partner more fully with faculty in instructional and assignment design, they may not be adequately prepared for this role.

Concerns that the Association of College and Research Libraries Information Literacy Competency Standards for Higher Education, along with their performance indicators, lacked some essential factors that should have been included led John Budd to offer an alternative approach. In his opinion, the present Standards are based on a syntactic model for working with information.
Karen Diller and Sue Phelps investigate the use of portfolios and rubrics in the beginning phase of an outcomes assessment program undertaken at Washington State University at Vancouver. Librarians assisted teaching faculty in developing a method for assessing student learning in its general education program. The program is based on student learning goals, including information literacy goals. The authors explain that online software was used to evaluate the portfolios’ content. Washington State University at Vancouver’s information literacy program is based on ACRL best practices and authentic assessment.\(^7\)

Kate Zoellner, Sue Samson, and Samantha Hines describe a project undertaken to assess the teaching and content of a module embedded in an undergraduate course, Introduction to Public Speaking, which is a general education requirement at the University of Montana. Pre- and post-surveys were used to assess student research confidence, perceptions of information tools, Web evaluation abilities, and assistance-seeking attitudes. The data from 426 student responses was analyzed to determine internal benchmarks and improve the University’s curricula.\(^2\) In the summer of 2006 Kristin Hoffmann and others conducted a study at the University of Western Ontario that focused on “graduate student perceptions of their library research needs, their preferences for learning about library research, and the appropriateness of a common instruction program for students” majoring in engineering, the health sciences, medicine, dentistry, and science. The librarians used the findings of their study to assist them in developing non-course-based, non-mandatory library instruction programs to meet the needs of graduate students.\(^3\)

Donald Gilstrap and Jason Dupree report on the use of Brookfield’s Critical Incident Questionnaire at the Southwest Oklahoma State University Libraries as a qualitative instrument for assessing information literacy skills. A sample of 348 English Composition II students was studied over a period of two semesters during a four-session instructional program. The results of their study showed that the questionnaire was an effective instrument for assessing critical reflection.\(^4\) Lana Ivanitskaya and others review the results of tests that assessed the information literacy skills of off-campus students.\(^5\) The researchers used a “Research Readiness Self-Assessment” survey as a pre- and post-test in an off-campus Master’s degree class at Central Michigan University.

An examination of the degree to which the regional accreditation organizations incorporated and treated information literacy in their standards was undertaken by Laura Saunders. She conducted a content analysis of the organizations’ Web-based resources and maintains that there is much support for information literacy and encouragement for partnerships between librarians and faculty in instruction and assessment. Saunders explains how the library can support institutional missions and accreditation standards.\(^6\) An article on continuous assessment, authored by Randall Schroeder and Kimberly Mashek, discusses how information literacy instruction, required in five core courses in Wartburg College’s general education program, is assessed at multiple times and in multiple ways using both direct and indirect assessment. This rigorous information literacy assessment has persuaded “reluctant faculty and administrators to buy into the program.”\(^7\)

Lynn Cameron, Steven Wise, and Susan Lottridge write about the Information Literacy Test (ILT) developed at James Madison University Library.\(^8\) The test was developed to measure student achievement using the ACRL Information Literacy Competency
Standards for Higher Education as the basis for rating. The authors foresaw the possibility that the test would become more generally attractive for use at other institutions. The test makes frequent use of graphics, documents, and webpage images. Davida Scharf and others investigate assessment of student information literacy skills using writing portfolios. In this study, graduating seniors taking a capstone seminar in the Humanities at the New Jersey Institute of Technology were required to create a writing portfolio. These portfolios included term papers that were assessed for this study.

Because of the inclusion of information literacy in the efforts of many colleges and universities to assess their programs and courses, libraries have been able to play a greater role in the formal planning of general education programs and courses. Articles that address the efforts to integrate information literacy into general education often point out the importance of forming strategic alliances to establish information literacy as a foundation for student learning. Thomas Mackey and Trudi Jacobson discuss the need for a strategy to accomplish this. In another article published in 2007, Nancy O’Hanlon explains how librarians can play a role in their institution’s student learning outcomes assessment process and reports on a study that determined the impact of the Ohio State University Libraries’ information literacy program on a number of required general education courses.

Librarians pilot-tested three methods designed to assess the library instruction program at Cornell University’s Albert R. Mann Library in 2007. The assessment instruments used collected data on patron attitudes about the program, learning outcomes, and gaps in instructor and patron attitudes toward learning outcomes for the program’s workshops. The authors maintain that combinations such as these three different kinds of assessment methods address the shortcomings of a single method used by itself and provide a better measure of a library instruction program in its entirety.

Self-assessments of information literacy skills have also been conducted. Gillian Gremmels and Karen Lehmann discuss a two-year study that compared student “self-reports” of what they had learned during interviews at the reference desk with the librarian statements of what was taught and tested whether students perceived a relationship between what they had learned during the interview and the information literacy content taught in a previous class. Similarly, Katherine Schilling and Rachel Applegate analyze data from surveys, written tests, and a practical information literacy exercise to determine the extent to which students’ perception about their information literacy skills matched their demonstrated skills. They also examined students’ attitudes about the library and librarians to determine whether a relationship existed between attitudes and grades. The analysis revealed discrepancies between students’ opinions, self-assessments, and graded tests.
Shikha Sharma reviews a study done at the University of Connecticut’s Homer Babbidge Library that examined the use of Web-based research portfolios in an information literacy course. The author suggests that the Web-based portfolio format is a very effective instrument for teaching research skills and for facilitating authentic assessment.85 Pamela Jackson reports on pre- and post-test assessment results that revealed students’ understanding of plagiarism. The students studied were Computer Science majors at San Jose State University. Data from 2,829 student scores was analyzed. One of the study’s findings was that students generally have trouble understanding paraphrasing.86

In “The One-Minute Paper and the One-Hour Class” Elizabeth Choinski and Michelle Emanuel investigate the use of an assessment technique by which students write brief answers to specific questions. This technique provides instant feedback from students on the lesson of the day.87 In addition, Lorrie Knight discusses the use of a scoring rubric based on course learning objectives and the ACRL Information Literacy Competency Standards for Higher Education.88 The rubric was used to score students’ course bibliographies. The Educational Testing Service created a revised version of its Information and Communication Technology Literacy Assessment (now called iSkills) in 2006. The assessment measures the “abilities to define, access, manage, integrate, evaluate, create, and communicate information.”89 These are the skills addressed in the ACRL Information Literacy Competency Standards for Higher Education.

Paul Hrycaj discusses an analysis of 100 online syllabi for introductory library skills courses at various institutions of higher education. They were analyzed for subject content, assessment techniques, and teaching methods. The ACRL Information Literacy Competency Standards for Higher Education were used as a framework for categorizing and placing in context the syllabi’s subject content.90 Marlene Asselin, Margaret Early, and Margot Filipenko discuss issues relating to assessment policies and practices for the Canadian literacy curricula that the Canadian Ministries of Education had previously expanded to include new developments in information and communication technologies. Their examination of these developments and prospects for the future was based on interviews of Ministry personnel. The authors argue for a more balanced approach to assessment and accountability than what the Ministry personnel had crafted.91

In an article published in 2005, Barry Cull discusses a study of teaching practices and instructional experiences among academic librarians in Canada’s Maritime Provinces. Instruction librarians at six universities were interviewed. The study’s results indicated that generally the librarians were self-reflective, student-focused, and competent teachers. They all believed that information literacy played a core role in academic libraries. Cull’s article also records the challenges and future predictions for information literacy as seen by the study’s participants.92

The impact of trends brought about by the South African government’s policies in higher education on academic libraries’ efforts to expand their information literacy programs is analyzed by Karin De Jager and Mary Nassimbeni. The authors review the progress made by librarians in creating partnerships with faculty members to deliver quality education and make the point that government policy initiatives in higher education can go a long way toward accelerating the growth and acceptance of information literacy education.93 Margy MacMillan reports on a self-assessment tool called I-SKILLS Resume that asks students to develop individual resumes emphasizing their informa-
A Review of the Literature on Assessment

Lori Buchanan and others relate how the integration of information literacy competencies into a first-year experience course taught at Austin Peay State University in Tennessee involved developing curricula, training instructors, and creating tools for learning-outcomes assessment. The authors emphasize planning. In 2007, Tyrone Cannon completed a dissertation titled “Closing the Digital Divide: An Assessment of Urban Graduate Teacher Education Students’ Knowledge of Information Literacy and Their Readiness to Integrate Information Literacy into Their Teaching.”

Collection Assessments

The article authored by Robert Alan and others examined in this section represents a significant contribution to the literature on collection development. Librarians wanting to learn more about collection assessment from the perspective of cost effectiveness should consider reading it.

Collection development is defined as the planned purchase of materials in various formats to meet the instructional and research needs of a university. Assessment of a collection can be accomplished in different ways. Virginia Williams discusses the needs of education students and the characteristics of juvenile literature that academic librarians must be aware of when developing juvenile literature collections. She examines standard tools for selecting children’s and young adult materials, analyzes their usefulness for building collections that support teacher education programs, and provides advice for evaluating juvenile collections.

Robert Alan and others describe assessments of the monograph approval plan profiles of the University of Illinois at Urbana-Champaign and Pennsylvania State University undertaken to answer questions about use, cost effectiveness, and coverage. Data was collected from vendors and local online systems on books received, item circulation, and overlap of the two plans. The study period at both institutions was July 1, 2004, to June 30, 2005, for the approval plan purchasing data and July 1, 2004, to March 31, 2007, for the circulation data. The study measured the cost effectiveness of each plan by subject and publisher, analyzed similarities and differences in the use of new titles, and examined the overlap between the two plans. The study’s primary research question was “Can a cost/use ratio be derived that indicates the point at which an approval plan profile is effective or ineffective?” Matthew Ciszek and Courtney Young examine the methods that can be used to assess an academic library’s collections for diversity. The methods include use of the WorldCat Collection Analysis tool, use statistics, comparing a collection to standard bibliographies, and the use of focus groups, interviews, and surveys. They point out that having a clear definition of diversity in place before the assessment is important.

Public Services

Significant sources discussed in this section include the article written by Bella Gerlich and Lynn Berard about a project that used the Reference Effort Assessment Data Scale to evaluate data collected by reference staff and the article by Corey Johnson and Elizabeth Lindsay that explores work-related priorities among public services librarians. Also,
Jan Brophy and David Bawden’s article that compares Google with library databases is interesting.

This section examines sources on the assessment of the public services offered by academic and research libraries other than information literacy instruction. Though instruction is an important service libraries provide their public, the author decided to create a separate section for information literacy because of the very large number of publications on that topic. The areas of public service treated here include reference, including the use of databases, search engines, and other kinds of electronic services to find information; interlibrary loan/document delivery; and loaning technology to users. One of the sources examined surveyed ARL public service librarians generally.

Jim Hahn and others provide an overview of the planning and implementation process for a technology loaning program employed at the Library of the University of Illinois at Urbana-Champaign. The program’s purpose is to meet student needs for multiple technologies to support assignments and other projects on campus. The authors discuss the program’s need for policies and procedures related to acquisitions, budget allocation, processing, cataloging, check-out, replacement, and equipment security, as well as marketing the new service. The program’s comprehensive planning process included the use of surveys, focus groups, informal interviews, and campus conversations with stakeholders to gather information on student needs and best practices for the program. Analysis of the data collected led to several changes in existing services and the implementation of some new services, including the technology loaning program. The planned continuous evaluation of the program to assess its impact will keep it relevant as student technology needs change over time.

Bella Gerlich and Lynn Berard review the findings of a project that applied the Reference Effort Assessment Data (READ) Scale to evaluate data collected from 170 participating reference staff at 14 academic libraries in the spring of 2007. The READ Scale is a six-point tool used to categorize qualitative data collected during reference transactions. The data relates to skills, knowledge, techniques, and tools the librarians consulted during the reference transactions. The authors discuss practical approaches to employing the READ Scale data.

Tim Bucknall compares three models for getting access to journal literature—direct subscriptions, pay per view, and “big deals” offered to library consortia. His analysis of the models reveals that both pay per view and the “big deal” offered frequently consulted additional content and that both are cost effective alternatives to the traditional direct subscription model. Truong Luong and Chern Liew report on a project that applied a checklist to assess the “usability features” of the online public access catalogs (OPACs) of New Zealand’s academic libraries. They also compare how the libraries with the same software customized their interfaces to make them more user-friendly. Most of the OPACs assessed received high scores on the checklist in the areas of bibliographic display, text, layout, labels, and assistance to the public. However new features associ-
ated with search engines, features such as word cloud, faceted navigation, most popular ranking, and related items, were not available in the OPACs.

Liz Burke reports on a project done in 2006 that investigated the models and methods for delivering reference services in Australian academic libraries. Information was gathered using a survey that was sent to the forty Australian university libraries. Burke discusses the survey’s main finding that reference services have changed in recent years and concludes with the observation that there will be an expanding role for reference librarians in helping patrons navigate an increasingly complex information environment.104

Andrew Leykam reports on a study that assessed interlibrary loan (ILL) services at the College of Staten Island Library to determine who was using the service. ILL data was collected over a three-year period, and usage patterns were determined from the data. The researchers found that faculty members constituted the majority of the service’s users and that a majority of them were from a limited number of departments. The author recommended that the usage patterns disclosed by the study’s data be used to improve liaison outreach activities to departments that seldom used ILL services.105

Corey Johnson and Elizabeth Lindsay explore the job components most important to public service librarians. They surveyed librarians at ARL libraries to discover the factors that determined how public service librarians spent their time at work. Among other things, the study disclosed opinions about those portions of their work most personally satisfying and about responsibilities for tenure and continuing education. Many of the librarians surveyed perceived a mismatch between what they viewed as important to users and their own priorities related to achieving tenure.106

Jan Brophy and David Bawden report on a study that compared Google with library databases and systems in order to assess their relative value, strengths, and weaknesses for finding information. The systems’ performance was assessed in terms of coverage, unique records, precision, quality, and accessibility of the results. The authors discuss four case studies that examined both quantitative and qualitative aspects of the systems. The quantitative results permitted assessments of “recall, precision, overlap, and similar factors.” Qualitative results permitted evaluation of the value of information. Among other things, the study’s findings indicated that Google had better coverage and greater accessibility, but the library resources provided results of higher quality.107

**Staff Assessment Surveys**

A handful of interesting staff assessment surveys have been reported in the professional literature. Eileen Shepherd describes the planning, implementation, and evaluation of a staff development program for the librarians at Rhodes University Library in South Africa.108 A group of fifteen librarians participated in an eight-session course that covered information retrieval skills using databases and offered an introduction to concepts relevant to present-day academic libraries. The content was taught using course man-
agement software in a classroom environment. Participants were required to complete a two-hour final test. The test results were used to determine whether staff were meeting the course’s learning outcomes and to improve the program. Elizabeth Jordan reports on projects undertaken by the University of Queensland Library (Australia) over an eight-year period beginning in 1999 to assess its staff members’ work motivation. Jordan examines the survey instrument, the methods used to analyze the data, and the results. Sue Baughman reports on the use of the Individual-Team-Organization (ITO) Survey, an assessment tool that measures library staff perceptions in a team-based structure. She explains that “ongoing use of the ITO Survey has helped the [University of Maryland] Libraries better understand the challenges of continuous learning among librarians and staff.”

Conclusion

In recent years, academic and research libraries have emphasized quality assessment and in particular student learning-outcomes assessment. This is reflected in the considerable number of articles, books, and conference papers about LibQUAL+™, the findings derived from application of the LibQUAL+™ survey at various institutions, and the use of a variety of instruments and methods to assess student learning outcomes in information literacy classes and one-shot sessions. Input and output assessment has become less important as reflected by the fact that data from these kinds of assessments are often not included in the annual reports of library directors. Indeed, one of the sources discussed in this article maintains that a substantial number of the 28 ARL libraries it studied no longer write an annual report. However, ARL still collects such data.

Over many years, trends occur wherein particular philosophies or methods of assessment become popular for a period of time during which they get considerable use at institutions, are thoroughly discussed at meetings, and receive extensive coverage in the published literature. Total Quality Management was popular in the 1980s and 1990s. Today’s trend emphasizes quality assessment tools like LibQUAL+™ and student learning-outcomes assessment. Because of federal and state government education policies and the standards of the regional higher education accreditation organizations, quality assessment and learning-outcomes assessment will remain important and will likely receive extensive coverage in the literature for some time to come. As the pace of the digitization of journals and books increases, use statistics of these online resources will become still more important. These statistics have already begun to replace the more traditional input and output data.

Jon R. Hufford is Liaison Librarian to the College of Engineering in the Research, Instruction, and Outreach Department at Texas Tech University Library. E-mail Jon.hufford@ttu.edu.

Notes

60. Dorothy Warner, A Disciplinary Blueprint for the Assessment of Information Literacy, (Westport, CT: Libraries Unlimited, 2008), ix, xii.


96. Tyrone Cannon, “Closing the Digital Divide: an Assessment of Urban Graduate Teacher Education Students’ Knowledge of Information Literacy and Their Readiness to Integrate Information Literacy into Their Teaching” (EdD diss., University of San Francisco, 2007), 1–4.


