

# Library Assessment Conference

Building Effective, Sustainable,  
Practical Assessment

PROGRAM ABSTRACTS



CHARLOTTESVILLE, VIRGINIA  
OCTOBER 29-31, 2012



## Plenary Session I

**Living in the Cloud: Who Owns It, Who Pays for It, Who Keeps It Safe, and Will My Kids Inherit the Wind?**

John Lombardi (American university professor and administrator)

**Dollars and Sense: the New Financial Realities of Higher Education**

John Simon (Provost, University of Virginia)

**Higher Education in a New Era of Public Accountability. What Does This Mean for You?**

Judith Eaton (President, Council for Higher Education Accreditation)

## Value

**What Do We Want to Know: Articulating a Research Agenda for the Value of Academic Libraries**

Lisa Hinchliffe (University of Illinois, Urbana-Champaign), Megan Oakleaf (Syracuse University), Kara Malenfant (Association of College and Research Libraries)

**Assessment of the Use Value and ROI of All Academic Library Services**

Donald King (Bryant University), Carol Tenopir (University of Tennessee), Liz Whitson (University of Tennessee), Ben Birch (University of Tennessee)

**The Value of Our People: Towards a Scorecard for Human Capital in Academic and Research Libraries**

Stephen Town (University of York), Jo Black (University of York), Ian Hall (University of York)

## Data and Impact

**The ARL Investment Index Revisited: In Search of Reliable and Valid Indicators of Extensiveness of Research Libraries in the 21st Century**

Martha Kyrillidou (Association of Research Libraries), William Grey Potter (University of Georgia), Brinley Franklin (University of Connecticut), Colleen Cook (McGill University), Bruce Thompson (Texas A&M University)

**Measuring the Impact of Electronic Library Materials on the University's Research Mission**

Michael Rawls (Virginia Commonwealth University)

**Using Library User Surveys to Assess the Library's Impact on Student Outcomes**

John Stemmer (Bellarmine University), David M. Mahan (Bellarmine University)

## **Information Services**

### **Using a Mixed Method Approach to Assessing Roaming Services: A Case Study**

Consuella Askew (Florida International University), Marissa Ball (Florida International University)

### **Shop Your Way to Service Excellence: Secret Shopping for Academic Libraries**

Kathryn Crowe (University of North Carolina at Greensboro), Agnes K. Bradshaw (University of North Carolina at Greensboro)

### **Secret Shoppers in the Library**

Jennifer Jones (Georgia State University)

## **Organizational Performance**

### **Do We Have What it Takes? Assessing Liaison Librarians' Skill Sets to Build Strong Partnerships and Ensure Better Outreach in a Quickly Changing Research and Learning Environment**

Denise Hersey (Yale University), Francine DeFranco (University of Connecticut)

### **The Quality Maturity Model: Your Roadmap to a Culture of Quality**

Frankie Wilson

### **One Size Doesn't Fit All? Harnessing Multiple Assessment Frameworks to Build the Value Proposition for the Organisation**

Meredith Martinelli (Macquarie University), Jennifer Peasley (Macquarie University)

## **Teaching and Learning I**

### **Utilizing Cross-Campus Collaboration to Improve the Assessment of Information Literacy**

Nisa Bakkalbasi (Columbia University), Jason Kopp (James Madison University), Jonathan Paulo (James Madison University), Donna Sundre (James Madison University), Stefanie Warlick (James Madison University), Sara Williams (James Madison University)

### **Library Faculty and Instructional Assessment: Creating a Culture of Assessment through the High Performance Programming Model of Organizational Transformation**

Meredith Farkas (Portland State University), Lisa Hinchliffe (University of Illinois, Urbana-Champaign)

### **Collaborating with Campus Assessment Services to Evaluate Information Literacy Skills of Graduating Undergraduates**

Irene Ke (University of Houston), Christina Gola (University of Houston)

## **New Roles**

### **Too Much Assessment Not Enough R&D**

Brian Mathews (Virginia Tech)

### **Assessing the Library's Grants Program**

Jamie McGowan (University of Illinois, Urbana-Champaign), Beth Sandore (University of Illinois, Urbana-Champaign)

### **Is Experience the Best Teacher? Field Experience and Student Learning in LIS Education Programs**

Susan Searing (University of Illinois, Urbana-Champaign), Scott Walter (DePaul University), Tanner Wray (University of Maryland)

## **Tuesday, October 30**

### **Plenary Session II**

#### **Library Assessment and Big Data: The Need for Ethical, Legal, and Philosophical Analysis**

Siva Vaidyanathan (Robertson Professor and the Chair of the Department of Media Studies, University of Virginia)

### **Space**

#### **TEALS (Tool for Evaluation of Academic Library Spaces) Project: Evaluating Physical Library Spaces**

Neda Abbasi (Deakin University), Hisham Elkadi (Deakin University), Anne Horn (Deakin University), Sue Owen (Deakin University)

#### **Practical Research for Library Space and Service Design**

Bertha Chang (North Carolina State University), Honora N. Eskridge (North Carolina State University)

#### **Designing and Assessing Library Services**

Elliot Felix (Brightspot Strategy)

#### **Multidisciplinary Rethinking and Redesign of Library Space**

Patricia Steele (University of Maryland), Nancy Fried Foster (University of Rochester)

## **Teaching and Learning II**

### **Project RAILS: Rubrics, Results, & Recommendations**

Megan Oakleaf (Syracuse University), Jackie Belanger (University of Washington Bothell), Jenny Mills (Belmont University)

### **Impact of Library Instruction in Different Academic Disciplines: An Analysis of Student Transcripts and Course Syllabi**

Melissa Bowles-Terry (University of Wyoming)

### **Rolling It Up: The Evolution of an Information Literacy Assessment Plan**

Elizabeth Dolinger (Keene State College)

### **Assessment of Information Literacy as a Student Learning Outcome: Overcoming Barriers and Achieving Standards**

Laura Saunders (Simmons College), Megan Oakleaf (Syracuse University)

## **User Assessment & Behavior**

### **Collaborative Ethnographic Needs Assessment of Doctoral Students in the Humanities**

Damon Jaggars (Columbia University), Kornelia Tancheva (Cornell University)

### **Increasing the Impact & Value of a Graduate Level Research Methods Course by Embedding Assessment Librarians & Library Assessment**

Kirsten Kinsley (Florida State University), Rachel Besara (Florida State University)

### **Student Information Seeking Behaviors: A Case Study in Collaboration**

Allyson Washburn (Brigham Young University), Sheila C. Bibb (Brigham Young University)

### **Research Support Services for Scholars: Understanding Evolving Research Practices**

Jennifer Rutner (Ithaka S+R), presented by Matthew Long (Ithaka S+R)

## **Communicating Value**

### **Telling the Story: Library Assessment for University Leadership**

Donna Tolson (University of Virginia), Martha Sites (University of Virginia), Anda Webb (University of Virginia)

### **Making the Case for Institutional Investment in Libraries: The Value of Evidence-Based Narratives**

Steve Hiller (University of Washington), Lizabeth Wilson (University of Washington)

## **The ICOLC Balanced Scorecard Pilot: The Value of Collaborative Parallel Play**

Katherine Perry (VIVA, the Virtual Library of Virginia), James Self (University of Virginia)

## **Consortia Value: The Orbis Cascade Alliance**

Nancy Slight-Gibney (University of Oregon), Faye A. Chadwell (Oregon State University), Steve Hiller (University of Washington), Donna Reed (Portland Community College)

## **Special Collections**

### **Data Driven Decision Making: A Holistic Approach to Assessment in Special Collections Repositories**

Melanie Griffin (University of South Florida), Barbara Lewis (University of South Florida), Mark Greenberg (University of South Florida)

### **Understanding the User's Mental Model: An Evolving Design and Assessment Strategy for Archival Collection Description**

Rachael Hu (California Digital Library), Brian Tingle (California Digital Library)

### **Assessing Special Collections: How Do We Get from Where We Are to Where We Need to Be?**

Merrilee Proffitt (OCLC Research)

### **Methods for Measuring Return on Investment for Digitized Special Collections**

Ken Wise (University of Tennessee), Gayle Baker (University of Tennessee)

## **Discovery**

### **Beyond Usability: Building Discovery Tool Requirements through User Stories**

David Bietila (University of Chicago)

### **"It's All in the Metadata." Towards a Better QA for Ebooks**

Ravit David (University of Toronto and Scholars Portal), Dana Thomas (Ryerson University and Scholars Portal)

### **"Feels Like You've Hit the Lottery." Assessing the Implementation of a Discovery Layer Tool at Ryerson University**

Courtney Lundrigan (York University), Kevin Manuel (Ryerson University), May Yan (Ryerson University)

### **Did We Get What We Paid For? An Institutional Assessment of User Behavior, User Expectations, and System Performance of Web Scale Discovery Tools**

Doralyn Rossmann (Montana State University), Brian Rossmann (Montana State University)

## Teaching and Learning III

### **Charting Success: Using Practical Measures to Assess Student Learning in a Peer2Peer Research Model**

Annie Donahue (University of New Hampshire at Manchester)

### **The A-Team: Making a Plan Come Together Across Campus**

Rhonda Huisman (Indiana University-Purdue University Indianapolis)

### **Conversations with Students: Assessment Leads to Adjustment**

Julie Petr (University of Kansas), Amalia Monroe-Gulick (University of Kansas)

## Assessment in the Organization

### **Assessing Assessment: A Framework to Evaluate Assessment Practices and Progress for Library Collections and Services**

Nisa Bakkalbasi (Columbia University), Donna Sundre (James Madison University), Keston Fulcher (James Madison University)

### **The Assessment Needs of a Data-Driven Organization**

Lisa Horowitz (Massachusetts Institute of Technology), Christine Quirion (Massachusetts Institute of Technology), Jennie Murack (Massachusetts Institute of Technology)

### **Collaborative Measures Building Using the Balanced Scorecard in North American Libraries**

Elizabeth Mengel (Johns Hopkins University), Vivian Lewis (McMaster University)

## Collections / E-Resources I

### **Multi-Institution Circulation Patterns in a Cooperative Interlibrary Loan Program**

Kathleen Bauer (Yale University)

### **Mining eResource Data to Reveal Hidden Assets: How One School Dug Deeper into MINES to Illustrate the Value of eResources**

Catherine Davidson (York University), Aaron Lupton (York University)

### **MINES for e-Books**

Brinley Franklin (University of Connecticut), Terry Plum (Simmons College)

## **Mixed Methods**

### **Quest for Continuous Improvement: Applying Feedback and Data Gathered through Multiple Methods to Evaluate and Improve Use of a Library's Discovery Tool**

Jeanne Brown (University of Nevada, Las Vegas)

### **Herding Cats, Knitting Fog, and Nailing Pudding to the Wall: Toward a Mixed-methods Approach to Evaluating Social Media Marketing in Libraries**

Selene Colburn (University of Vermont)

### **Defining User Experience in Libraries**

Joe Gilbert (University of Virginia), Erin Mayhood (University of Virginia)

## **Institutional Data**

### **Mining Library and University Data to Understand User Populations and Behavior**

Scott Britton (University of Miami)

### **Game of Clones: Using Analytical Research Data to Identify Institutional Peers and Collections Needs**

Elizabeth Brown (Binghamton University)

### **NCES Datasets and Library Value: An Exploratory Study of the 2008 Data**

David Schwieder (University of Florida), Lisa Hinchliffe (University of Illinois, Urbana-Champaign)

## **LibQUAL+®**

### **Tracking Academic Outcomes: What LibQUAL+® Tells Us about How Users View Information Literacy Outcomes**

Raynna Bowlby (Library Management Consultant and Simmons College), Daniel O'Mahoney (Brown University)

### **Closing the Loop: Are Libraries Communicating Assessment Results to Students?**

Meg Scharf (University of Central Florida), Nancy Cunningham (University of South Florida)

### **York University Libraries Implementation of LibQUAL+® Triads**

Dany Savard (York University), Marcia Salmon (York University), Aaron Lupton (York University)

### **LibQUAL+® Triads Pilot: Results from the University of Manitoba Libraries**

Marie Speare (University of Manitoba)

## **Collections / E-Resources II**

### **User-defined Valued Metrics for Electronic Journals**

Katherine Chew (University of Minnesota), James Stemper (University of Minnesota), Caroline Lilyard (University of Minnesota), Mary Schoenborn (University of Minnesota)

### **Applying Performance Measurement to Safeguard Budgets: Qualitative and Quantitative Measurement of Electronic Journal Packages**

Selena Killick (Cranfield University)

### **Electronic Collection Assessment and Benchmarking to Demonstrate the Value of Electronic Collections**

Stephen Miller (University of Maryland University College)

## **Plenary Session III**

### **Quality Frameworks in Academic Libraries: Organizing and Sustaining Library Assessment Activities**

Sarah Murphy (Ohio State University)

### **Library Assessment Today: More than Numbers**

Jim Self (University of Virginia)

## **Plenary Session IV**

### **Closing Panel**

Robert Fox (University of Louisville), Megan Oakleaf (Syracuse University), Jennifer Nutefall (Santa Clara University)

# Abstracts

## Plenary Session I

### **Living in the Cloud: Who Owns It, Who Pays for It, Who Keeps It Safe, and Will My Kids Inherit the Wind?**

John Lombardi (American university professor and administrator)

The inexorable flight to electronic resources, remote and dark storage, access rather than ownership, and the dramatic realignment of budget, influence, and authority that these transformations impose leave libraries and librarians in search of their future. In what often seems to be a swirling fog of proposals, projections, and projects, definitive guidance through this uncertain time remains unavailable. Although many offer attractive designs for the future, some pragmatic principles for action and recommendations for inaction may prove more useful. Drawing on long historical personal experience with libraries and librarians, “Living in the Cloud” will offer some solace and perspective, if not accurate predictions, for coping with the present and preparing for the future.

*John Lombardi is an American university professor and former university administrator. He is a native of California, and earned his bachelor's, master's and doctoral degrees before becoming a professor of Latin American history. Lombardi has served as the president of the University of Florida, the chancellor of the University of Massachusetts Amherst, and the president of the Louisiana State University System.*

### **Dollars and Sense: the New Financial Realities of Higher Education**

John Simon (Provost, University of Virginia)

*John D. Simon is the Executive Vice President and Provost of the University of Virginia and the Robert C. Taylor Professor of Chemistry. He is charged with directing the academic administration of the eleven schools, the Library, the Art Museum, public service activities, numerous University centers, foreign study programs and the advancement of teaching and research. He also co-chairs the Internal Financial Model Steering Committee.*

### **Higher Education in a New Era of Public Accountability. What Does This Mean for You?**

Judith Eaton (President, Council for Higher Education Accreditation)

Colleges, universities and programs have been engaged in “assessment movement” for more than 25 years. We have created and implemented assessment plans, responded to accreditors’ calls for assessment and point with pride to our assessment work as vital in the ongoing quest to sustain and enhance academic quality. Yet, especially since the report of the Commission on the Future of Higher Education in 2006, we have been in the midst of persistent and sometimes critical calls for greater public accountability for quality from government, media and policy leaders. The message here is that, while higher education’s work in assessment is duly acknowledged, it is not sufficiently responsive to today’s environment in which greater transparency, reliable evidence of student achievement and clear and readily accessible information about our performance have taken center stage. What needs to be done to assure that we are publicly accountable going forward? How do we provide leadership here? How do we demonstrate value in the future?

*Dr. Judith S. Eaton is president of the Council for Higher Education Accreditation (CHEA), the largest institutional higher education membership organization in the United States. A national advocate and institutional voice for self-regulation of academic quality through accreditation, CHEA is an association of 3,000 degree-granting colleges and universities.*

## **Value**

### **What Do We Want to Know: Articulating a Research Agenda for the Value of Academic Libraries**

Lisa Hinchliffe (University of Illinois, Urbana-Champaign)

Megan Oakleaf (Syracuse University)

Kara Malenfant (Association of College and Research Libraries)

The Value of Academic Libraries: A Comprehensive Research Review and Report published by the Association of College and Research Libraries (ACRL) includes a detailed research agenda on a range of topics, discussing possible data sources and research questions. The comprehensive nature of the report has sketched a broad and varied landscape that shows an expansive range of possibilities. Discussions during open forum meetings have indicated that librarians appreciate seeing the breadth but would like greatly clarity about what might be the most important and useful research questions to pursue first.

**Purpose:** This paper reports on an invitational working session held as a pre-meeting to the American Library Association Annual Conference in Anaheim in June 2012. The half-day working session brought together experts to help scope and develop a specific, multi-year research agenda that the library research community could organize around and that could serve as the basis for pursuing grant funding for value research.

**Design/Methodology/Approach:** Participants in the invitational working session included leading researchers in the area of library value, particularly academic library value, as well as individuals who have pursued conversations with ACRL about the research agenda component of the report. Through a series of structured discussions and prioritization activities, participants contributed to a focused research agenda, which we are vetting with the academic library community.

**Findings:** The presentation will focus on the emergent research agenda, which would be included in the paper for the proceedings. Attendees will be asked for their feedback on the draft and also be alerted to additional opportunities for contributing to the research agenda. The final research agenda will be released by ACRL after the academic library community has provided input.

**Practical Implications/Value:** A focused research agenda developed through engagement with the academic library community will serve as a guiding document for furthering investigations on academic library performance and the value of academic libraries and will be particularly useful for individuals and organizations pursuing grant funding to support their research.

*Lisa Janicke Hinchliffe is co-chair of the Association of College and Research Libraries' Value of Academic Libraries Committee and Associate Professor for Library Administration at the University of Illinois at Urbana-*

*Champaign. Her research interests focus on assessment, performance measurement, information literacy, student learning, and professional development for academic librarians. Megan Oakleaf is co-chair of the Association of College and Research Libraries' Value of Academic Libraries Committee and Assistant Professor in the iSchool at Syracuse University. Her research areas include assessment, evidence-based decision-making, and instruction. Oakleaf was a librarian at NC State University and a teacher in Ohio public schools. Kara Malenfant is Senior Strategist for Special Initiatives at the Association of College and Research Libraries where she coordinates the government relations, scholarly communications, and value of academic libraries initiatives. Her research focuses on leadership, change, and the future of higher education. Malenfant was a librarian at DePaul University.*

## **Assessment of the Use, Value and ROI of All Academic Library Services**

Donald King (Bryant University)

Carol Tenopir (University of Tennessee)

Liz Whitson (University of Tennessee)

Ben Birch (University of Tennessee)

The principal purpose of the study is to demonstrate results of a comprehensive study of the use, value, and ROI of academic library services. There are many studies of the use of some services, value of others and ROI determined in several ways. The purpose of this paper is to present the results of a project that examines the use, value and ROI of all services of an academic library based on an in-depth analysis of the costs and a survey of faculty, staff and students. The project was conducted at Bryant University under an IMLS grant to the University of Tennessee, School of Information Sciences. Bryant is a small university with 258 faculty, 465 staff and 3,472 students. The cost analysis builds on well over 100 in-depth cost analysis of academic, public and special libraries and surveys recently conducted in universities worldwide by the University of Tennessee. The study is based on the premise that academic library value derives from investment in resources that are shared by faculty, staff and students. For example, the library provides access to print and electronic publications (journals and other publications) and other items (AV materials, other materials, institutional repository and equipment), staff support (reference, research, other assistance, duplications and instructions), space (workspaces, workrooms), and workstations. The cost analysis involves allocating staff, space, shelving, furniture and other purchases to these services. The survey asks faculty, staff and students the amount of use of each service; time spent using and, therefore, cost or purchase value; and use value such as purpose of use, importance of services in achieving the purpose; ways in which services affected the purposes, among other outcomes of use. Since Bryant University is small and some survey responses are few, reported use, value and ROI are based on weighted total faculty, staff and student responses. Also, since there are so many services, examples of the use, value and ROI given here are limited to scholarly journal articles, other materials, reference searches, instruction, access to workspace, and access to workstations. These examples demonstrate how library costs are allocated to faculty, staff and student use. One type of value and an indicator of why resources sharing is so important is the contingent value of services. That is, if specific services were not available from the library, what would users do. Some would not bother getting the information or service and others would go to an alternative source at a cost to them in their time and use of other sources. The difference in the alternative cost and current user cost (i.e., net benefit) is an indicator of contingent value. The return on library investment in each service are the values above. The dollar return is contingent value. The return on dollar investment ranges from 1.2 to over 10 to one. Details of methods are given in the report: "Demonstration of the Methods to Assess the Use, Value and ROI of all

Academic Library Services.”

*Mr. King, a statistician, has devoted over 50 years describing and evaluating information services and products. Since 2000, he has focused on academic cost studies, readership surveys, and national surveys of museum and public, academic, special and school library. He has co-authored 11 books and nearly 300 formal publications. His has been recognized as Fellow, American Statistical Association; Award of Merit and Research Award, ASIST; and Pioneer of Science Information, Chemical Heritage Foundation. Carol Tenopir is a Chancellor's professor at the School of Information Sciences at the University of Tennessee, Knoxville and Director of the Center for Information and Communication Studies. She is the author of five books, including Communication Patterns of Engineers, (IEEE/Wiley InterScience, 2004) with Donald W. King. Liz Whitson holds an MLIS degree from the University of Tennessee's School of Information Sciences. Currently, she serves as the Program Manager for the IMLS Lib-Value Project. She has worked as a project manager in the field of health information management and alumni and development reporting. Ben Birch is a Ph.D. student in the School of Information Sciences at the University of Tennessee, Knoxville. He holds a bachelor's degree in Mechanical Engineering from the Georgia Institute of Technology, and worked for a number of years as a Licensed Professional Engineer. Returning to school, he then earned master's degrees in Computer Science and in Information Sciences, both from the University of Tennessee, Knoxville.*

## **The Value of Our People: Towards a Scorecard for Human Capital in Academic and Research Libraries**

Stephen Town (University of York)

Jo Black (University of York)

Ian Hall (University of York)

**Purpose** The purpose of this paper is to describe the development of assessment and measurement methods for the human resource element of an academic library. The project will define data, measures and assessment approaches for human capital suitable for inclusion within broader assessment frameworks in use in academic and research libraries. **Design/Methodology/Approach** This is a case study of the research and development of a conceptual framework for the measurement of people in libraries as developing assets, as opposed to their prevalent current evaluation as little more than costs to be controlled. It employs a mixed method research strategy (multimethodology) combining phenomenological observation of existing data collection and development concepts, survey data from staff, and quantitative capital assessment methods. The multiple perspectives created will be used to synthesize a single framework for evaluation of human capital and its development and growth that will be compelling and convincing to all institutional stakeholders. **Findings** This research project is ongoing. The current timeline is for a strategy, framework and data elements to be defined and delivered by late summer 2012. Steps along the way providing data for the research include: the publication of the Library action plan relating to the University staff survey conducted in 2011 (due March 2012); the conduct and results of the ClimateQUAL® survey scheduled for May 2012; an information strategy study on staff as a key enabler informed by a staff training, development and strategy week in July 2012; parallel work on key performance indicators and data elements for staff related measurement; and a benchmarking study of human capital measurement in other organizational settings applied back to library staff. The result will be a full coherent framework for people measurement in an academic and research library which will be linked and embedded into a vision led and outcome driven University information strategy. This will provide assessment methods, measures and data to populate both Balanced and Value scorecard approaches used within

the Library. Practical implications/Value There is very little literature on the coherent measurement of this major component of the expenditure of academic and research libraries, and few specific methods and examples published of the way libraries define, develop and measure their human capital. This is despite the prevalence of people related assessment required within conceptual measurement frameworks for excellence such as the Balanced Scorecard, the Baldrige awards, EFQM and Investors in People. This contribution will provide assistance to any library wishing to develop measures for assessing and proving the value and impact of its people. The effective measurement of the role of staff within the modern academic research library will also provide institutions with a clearer basis for making investment decisions (or the reverse) in their human capital. It is expected that the results of this research and development will be transferable and applicable to other academic and research libraries internationally, and provide a basis for future benchmarking.

*Stephen Town is Director of Information & University Librarian at the University of York, UK, involving responsibility for libraries, archives and IT. Stephen has taught, researched, presented, consulted and written widely on library management, strategy and performance measurement resulting in international recognition and membership of relevant academic and professional boards. Ian Hall is Executive Officer for Information Strategy at the University of York, involving responsibility for monitoring and driving the implementation of this key strategy. Ian manages major IT, Library and quality projects including LibQUAL+® and TechQUAL surveys, and the Northumbria Performance Measurement conference. Ian is studying for an MBA. Jo Black is Staffing Officer for the Information Directorate at the University of York, UK, involving administration of all the key processes associated with staff, staff development and training and reward across the divisions of library, archives, IT and information policy. Jo is a graduate of the University of Warwick.*

## **Data and Impact**

### **The ARL Investment Index Revisited: In Search of Reliable and Valid Indicators of Extensiveness of Research Libraries in the 21st Century**

Martha Kyrillidou (Association of Research Libraries)

William Grey Potter (University of Georgia)

Brinley Franklin (University of Connecticut)

Colleen Cook (McGill University)

Bruce Thompson (Texas A&M University)

ARL Statistics 2011-2012 is undergoing a major revision process that has implications for the calculation of indices that ARL has been producing. The ARL Membership Criteria Index (or as we will often refer to it: the historical index) captured in an objective way the underlying characteristic that ARL research libraries had in common in the 20th century - large collections as reflected in volumes held, number of serial subscriptions, and complex organizations as reflected in the extensiveness of staffing and expenditures. The ARL Membership Criteria Index though was not an adequate indicator in the 21st century - the surge of electronic resources, the plethora of digital information, and the need to rely on large scale collaborative activities for specialized expertise and resources have marked the beginnings of the collections shift in research libraries. Large print collections are becoming a liability rather than an asset, distinct collections are not manifested via

massively marketed electronic ebook and ejournal packages and the value of the content is morphing into different products and services hard to capture with stable, reliable and valid indicators. ARL implemented the recommendations of the Task on New Ways of Measuring Collections back in 2007 with the development of the ARL Library Investment Index (originally known as the Expenditures-Focused Index). For a number of years ARL has continued to produce the new Library Investment Index while also calculating for limited distribution among member libraries only the ARL Membership Criteria Index - a name that evokes the original use of that index as a threshold for membership in the Association. With the current revision of the ARL Statistics the production of the ARL Membership Criteria Index will come to a halt. The historical index is comprised of five variables: Volumes Held, Volumes Added Gross, Current Serials, Total Expenditures and Professional plus support staff. The historical index variables are not strong predictors of the underlying elusive concept of a research library as they used to be in the earlier century. The utility of the collections indicators in the index is weakening. The end result is that the validity and reliability of these collection indicators has been questioned. With the conclusion of the 2010-2011 ARL Statistics data we will collect for the last time Volumes Added Gross and Current Serials according to the preliminary recommendations forwarded to the ARL Board and the ARL membership. The historical index therefore will be calculated for one last time in the form it currently exists. Its weakening explanatory power has been documented in earlier studies (Franklin, Cook, Kyrillidou and Thompson, 2009). We will document the methodological advantages of the ARL Investment Index, its limitations, as well as its political and philosophical significance. The end result is that the ARL Investment Index prevails as a reliable and valid indicator of extensiveness of a research library in the 21st century. This paper will examine the relation between the two indices and identify in what ways their relationship is changing. Finally, the paper will suggest emerging indicators surfacing from the ARL Profiles analysis and the need for capturing the elusive nature of Special Collections. The analysis will conclude with an examination of how the work on the new roles of documenting collections can inform the future development of quantitative and qualitative indicators of research library extensiveness, quality, and value. References: Franklin, Brinley, Colleen Cook, Martha Kyrillidou and Bruce Thompson. "Library Investment Index: Why is it important?" Proceedings of the 2008 Library Assessment Conference: Building Effective, Sustainable and Practical Assessment, August 4-8, 2009, Seattle, Washington: 147-153.

*Martha Kyrillidou is Senior Director, ARL Statistics and Service Quality Programs at the Association of Research Libraries. She is the editor of the ARL Statistics and the ARL Annual Salary Survey. She established and provides leadership for the evolution of the StatsQUAL® suite of services that includes protocols like MINES for Libraries, ClimateQUAL® and LibQUAL+®. William Grey Potter is University Librarian and Associate Provost at the University of Georgia. He is the chair of the ARL Statistics and Assessment Committee and the chair of the ARL Board appointed Task Force on Reviewing the ARL Salary Survey, the ARL Statistics, and the ARL Supplementary Statistics. He is currently leading the most significant revision of the ARL Statistics over the more than 100+ years of their existence. C. Colleen Cook is Dean of Libraries at McGill University (Canada). Prior to that she was Dean and Director at Texas A&M University Libraries. Colleen served as chair of the ARL Statistics and Assessment Committee and the IFLA Statistics Committee, and has served as ARL Board Liaison to the ARL Statistics and Assessment Committee and on the National Center for Education Statistics Academic Library Survey Advisory Committee. She has published extensively on library service quality assessment and improvement. She pioneered the development of the LibQUAL+® protocol that is extensively used across the globe. Brinley Franklin is Vice Provost, University of Connecticut Libraries. Brinley served as Chair of the ARL Statistics and Measurement Committee and has served on the National Center for Education Statistics Academic Library Survey Advisory Committee and on the IFLA Statistics & Evaluation Section. He has been President of ARL, the Boston Library Consortium, and Nelineet. Bruce Thompson is Distinguished Professor and College Distinguished Research Fellow of Educational Psychology, and Distinguished Professor of Library Sciences, Texas A&M University. He was the lead co-editor of the American Educational Research Journal (AERJ:TLHD), the editor of Educational and Psychological Measurement, the series, Advances in Social Science Methodology,*

*and two other journals. He is the author/editor of more than 200 articles, and several books, including Foundations of Behavioral Statistics.*

## **Measuring the Impact of Electronic Library Materials on the University's Research Mission**

Michael Rawls (Virginia Commonwealth University)

**Purpose** This study examines the scholarly output of 249 US doctoral institutions to determine if their libraries' investment in electronic materials has had an empirically discernible impact on the number of journal publications each institution produces. This inquiry is based on the concept that the speed, convenience, and multi-user accessibility of e-resources increases research productivity which, in turn, should cause a cumulative and noticeable campus-wide effect on publication output. Thus the expectation is that institutions investing more in e-resources should generate more journal articles. E-resource expenditures among these universities grew by 88% from 2005 to 2010, while non-electronic material expenditures decreased by 31%. This enormous shift in spending priorities is evidence of the ongoing paradigmatic transformation toward e-resources that academic libraries are experiencing. It falls upon libraries to evaluate and articulate how this sea change impacts their users and stakeholders - including providing evidence of how such resources help advance a university's research mission. This project was inspired by John Budd's work comparing library holdings to publication output.

**Design/Methodology/Approach** Using secondary data from the Web of Science, ACRL Academic Library Trends and Statistics Survey, and the Integrated Postsecondary Education Data System, a regression model was developed whereby the total number of articles produced by each institution from 2005 to 2010 served as the dependent variable. Relevant institutional and library characteristics believed to influence article output served as independent variables. Library variables consisted of a variety of expenditure, staffing, and collection-based measures, including e-resource expenditures. Relevant institutional characteristics included faculty size, research expenditures, PhDs awarded, and total revenue, among others. Data was gathered for each Carnegie-classified doctoral institution, with twenty-one dropped for insufficient data.

**Findings** The regression model ( $r$ -squared .933) identified a positive correlation between e-resources and journal output, with the e-resource expenditure coefficient significant at the .001 level. The number of articles produced per university increased about .0005 (.05%) for each additional dollar spent on e-resources. For example, an institution with a yearly average of 170 doctoral degrees awarded, \$125M in research expenditures, \$850M in revenue/appropriations, and \$3.75M in e-resource expenditures is predicted to have produced 6,396 journal articles. However, by increasing e-resources expenditures to \$5M, holding the other values constant, the model predicts an output of 7,000 articles. Furthermore, article output proved more responsive to increases in e-resources expenditures than to other variables. For example, a \$1M increase for e-resources generated 483 additional articles, while the same increase for research funding resulted in just seventeen. Library material and total library expenditures also impacted scholarly output, but their effect was respectively three and six times less than that of e-resources.

**Practical Implications/Value** This study adds to the broader discussion of how libraries expressly confer value to their host institutions. As university administrators rely increasingly on data driven decision-making, evidence-based studies that illustrate direct library connections to mission-related outcomes can offer compelling justification during funding decisions. In this instance, the indication that dollars invested in electronic library materials go further toward journal article production than dollars invested elsewhere is of particular note.

*Michael Rawls is the Budget and Assessment Director for Virginia Commonwealth University Libraries, where he previously served as Chief Financial Officer. He is currently completing his Ph.D. in Public Policy and Administration with a research interest in institutional research and assessment.*

## Using Library User Surveys to Assess the Library's Impact on Student Outcomes

John Stemmer (Bellarmine University)

David M. Mahan (Bellarmine University)

In the past few years, library assessment activities have focused on connecting the library's assessment efforts to institutional goals. This is especially evident since the publication of ACRL's Value of Academic Libraries (2010; <http://www.acrl.ala.org/value/>). More thought and effort has been put forth to developing appropriate measures that address the library's impact on students, particularly the impact on student outcomes and student learning. In a follow-up to this report, ACRL's Demonstrating Library Value: A National Conversation Summit (Chicago, December 2011), reiterated the need for library data at the student level. Bellarmine University is a Catholic coeducational liberal arts institution in Louisville, Kentucky founded in 1950. Bellarmine enrolls 3,100 students in over 60 programs at both the graduate and undergraduate level. The Bellarmine University Library has conducted 3 student user surveys since 2007; this survey provides individually identifiable data on why students come to the library and how often they use it. Using the library's biennial student user survey as a catalyst, the library and institutional research units collaborated to identify areas where relationships exist between a student's library usage and student outcomes. Statistical analysis of the data from the 3 surveys was conducted to examine the relationship, if any, between student use of the library and student outcomes. Linking institutional research office data on retention, graduation and cumulative GPA data with library user survey data allowed for the identification of specific areas of the library survey that correlated with the selected student outcomes. When broken down into class-based cohorts, the data identify multiple significant correlations, both positive and negative, between student use of the library such as studying alone or with a group, accessing library services online or in person and the student outcomes of 2nd year retention, cumulative GPA and graduation. These correlations provide valuable evidence that can help build a persuasive case for the value provided by the library in support of institutionally important student outcomes. Wong and Webb (2011) identified a single aspect of library usage (checking out books) that correlates with a single student outcome (GPA). Stone, Ramsden & Pattern (2011) focus on library information resources in their study of links between library usage and student attainment. This study identifies multiple library contributing factors that impact multiple student outcomes measures, and can be a model for other institutions seeking a means for assessing the library's relationship to student learning. This presentation will review how the data was collected and manipulated, the benefits of collaborating with campus institutional research, and the next steps for the project - including using the identified correlations to build regression models that will provide greater insight into the contribution of the library to student outcomes.

*John K. Stemmer, Ph.D. is Director of Library Services at Bellarmine University. He has over 18 years of experience in academic and research libraries at a wide variety of institution types. He has actively pursued assessment measures for the Bellarmine library since starting as director in 2006. David M. Mahan, Ph.D. is Director of Institutional Research and Effectiveness at Bellarmine University. Since 2006, Dr. Mahan has conducted research and assessment projects in multiple areas of the university such as enrollment management, student learning in the general education program, regional and discipline-specific accreditation, and HEOA compliance.*

## Information Services

### Using a Mixed Method Approach to Assessing Roaming Services: A Case Study

Consuella Askew (Florida International University)

Marissa Ball (Florida International University)

**Problem** In November 2011, we launched our roaming reference service at Florida International University (FIU) Libraries with a small group of 12 volunteers armed with iPad2s. In order to determine the efficacy of the program, we used a mixed method approach allowing us to use reference transaction data, user and librarian survey data, along with librarian comments and stories.

**Methodology** In order to get a big picture view of the service, we looked at reference service usage data. To get at the users' perspective of the service in particular, we created a survey to obtain their feedback at the point of service. To round out this data collection effort, we created a survey for the librarian to complete at point of service as well, and solicited their feedback and observations regarding the service deployment and user reactions. The surveys were created using Qualtrics, a web-based survey tool, licensed by our university. In order to encourage participation, the surveys were very brief; the user survey consisted of four items and the librarian survey had two items. To allay any concerns about retribution, users were notified that all responses were confidential and once they clicked on the survey submit button, all responses would be recorded and disappear before the iPad was handed back to the librarian. The librarian would then complete the librarian survey. The roaming service coordinators collected feedback from the librarians in the format of comments and anecdotes to find out how the service was catching on and to seek suggestions for improvement.

**Findings** Preliminary findings from the surveys indicate that our students typically seek assistance from the librarians once a term (33%) or once a month (25%). Their interactions with the librarians thus far have been almost equally curriculum related (54%) as well as not (48%) and they found the librarians to be helpful to varying degrees in addressing their research needs. The most promising finding of all, was that the majority (83%) indicated that they would seek a librarian's assistance more frequently if a librarian was available on the various floors of the library. This latter finding has implications for the deployment of our roaming program as we seek to enhance its effectiveness. Librarian responses to the survey determined that librarians initiated (82%) of the roaming reference interactions and most likely this trend will continue into the future. Also, it seems the librarians were harder on themselves than our users, when assessing their helpfulness. Collected comments and observations indicate that overall the librarians see the roaming service as a value added reference service and there is a general feeling of being able to connect with those students who might otherwise not seek out our assistance.

**Practical Implications/Value** The results from this assessment study will enable us to strengthen our current roaming services by identifying and fulfilling our student needs. In addition, our findings will help fill a gap in the professional literature pertaining to the assessment of roaming reference services.

*Dr. Consuella Askew is currently Associate Dean for Public Services at Florida International University Libraries. Throughout her 20 years as a librarian she has worked in school, academic, public and special libraries and spent several years working with the ARL LibQUAL+® program. Her research interests include assessment, library leadership and HBCU libraries.*

## **Shop Your Way to Service Excellence: Secret Shopping for Academic Libraries**

Kathryn Crowe (University of North Carolina at Greensboro)

Agnes K. Bradshaw (University of North Carolina at Greensboro)

Secret or mystery shopping is a standard method of evaluating customer service in the retail and hospitality world. While many public libraries have implemented mystery shopping few academic institutions have. Two universities in Virginia (USA), Radford and Longwood, used this protocol in 2008 to evaluate service at their reference desks.# The University Libraries at the University of North Carolina at Greensboro (USA) conducted LibQUAL+® in 2008. The overall “affect of service” score was quite good (7.5 perceived mean); qualitative comments, however, indicated there were issues at some service desks. To gain more information we built on the Radford/Longwood study to evaluate desk, telephone and chat services at the Reference Desk, Check-out Desk and Music Library. Students were recruited from a Hospitality Management class to serve as the secret shoppers. They attended a two hour training session and received scripted questions to use. “Shoppers” completed a rating sheet for each encounter that was based on customer service values established by the Libraries. Averages of the overall results were shared with the entire library and more specific departmental information shared with appropriate supervisor. Findings were generally quite positive but indicated that we could improve “going the extra mile” and “confirming satisfaction.” As a result, we developed training sessions for public services staff which were delivered during Summer 2011. A LibGuide with training videos was created for students and all public services students were required to complete them and comment. In addition, we developed more specific public service standards for procedures such as answering the telephone, confirming satisfaction and referring patrons to other offices The Secret Shopper assessment was administered again in Spring 2012 to see if scores improved. In the interim the Special Collections unit added a service point so it was added to the study. We will also conduct LibQUAL+® in Fall 2012 to see if scores and qualitative comments improve. This presentation will provide information on planning for the secret shopper exercise, the methodology used for the assessment, the training provided for students, training implemented based on assessment results and the impact of the training.

*Kathryn M. Crowe is Associate Dean for Public Services at the University of North Carolina at Greensboro. She supervises Reference and Instructional Services, Access Services and the Music Library and also has overall responsibility for assessment. Agnes K. Bradshaw is the Human Resources Librarian at the University of North Carolina at Greensboro. She has responsibility for staff training and development.*

### **Secret Shoppers in the Library**

Jennifer Jones (Georgia State University)

Purpose: Like many libraries, Georgia State University (GSU) Library consistently evaluates most of its services and resources, but the provision of high-quality reference service is assumed more than it is measured. As part of its fiscal year 2010-2011 Institutional Effectiveness Assessment Plan, GSU Library committed to investigating the quality of reference services provided by library employees in order to get a better picture of this core, and under-assessed, function of the library. Design/Methodology/Approach: In 2009, the library evaluated customer service skills of library employees using the secret, or mystery, shopper approach often used in retail establishments in the private sector. In 2010, the library chose to evaluate reference services using the same method. Volunteers posed as students with reference questions, engaged employees in informally scripted interactions, and then assessed the employees’ reference skills using an evaluation form. The evaluation forms

were based on the Reference and User Services Association's Guidelines for Behavioral Performance of Reference and Information Service Providers (<http://www.ala.org/ala/mgrps/divs/rusa/resources/guidelines/guidelinesbehavioral.cfm>) and consisted of numeric rating scales. Volunteers rated whether and to what extent employees exhibited certain behaviors during their interactions with volunteers. Additionally, volunteers were asked to provide written comments to justify their numeric scores. The interactions occurred in person at the reference desk, circulation desk, and special collections reading room desk; online via email; and over the phone with reference desk, circulation desk, and special collections reading room desk employees. Findings: Based on the evaluation results, one identified issue was that employees routinely took patrons' questions at face value and responded accordingly, without attempting a reference interview. For example, if a patron asked about the location of magazines, the library employee did not attempt to find out whether the patron was looking for a specific title, issue, article, etc., and instead directed the patron to the location of the physical magazines. As another example, if a patron requested information about birds, the library employee did not make an effort to determine what kind of information was needed (a particular species, theme of birds in a work of literature, birds depicted in art, etc.) Another issue of potential concern is that library employees unnecessarily referred patrons. During the course of the project, library employees referred volunteers to other library departments, other campus departments, and, in one situation, to another institution. All of the scenarios used in this study were designed so that any library employee could respond to them using resources in this library. The findings of the study served to inform reference interviewing training; make reference interviewing training a regularly offered workshop; and promote discussions among supervisors and employees about reference interviewing expectations. Practical Implications/Value: While the secret shopper method is not a novel one, it seems to be underused in libraries, perhaps because it seems challenging to execute. This paper will show that the challenges are minimal, and the results of the effort are quite worthwhile.

*Jennifer L. Jones is the Assessment & User Experience Librarian at Georgia State University Library. Her research interests include assessment methods and techniques.*

## **Organizational Performance**

### **Do We Have What it Takes?: Assessing Liaison Librarians' Skill Sets to Build Strong Partnerships and Ensure Better Outreach in a Quickly Changing Research and Learning Environment**

Denise Hersey (Yale University)

Francine DeFranco (University of Connecticut)

Purpose: Academic libraries have used library liaison programs to provide personal, customized research and instructional services to academic department staff, faculty and students. However, as the work, methods, and tools of library constituents change, liaisons must adapt their roles which now include an increased emphasis on new methods of providing services and outreach. An essential part of this process is identifying whether liaisons have, or how can they develop, the skills necessary to support the changing needs of the academic community. Liaison librarians at two large academic libraries in Connecticut, the University of Connecticut and Yale University, decided to investigate this question together. They began this assessment by organizing a workshop for both institutions' liaisons. The workshop provided a venue for liaisons to discuss the changing roles of liaison work and to focus on identifying the knowledge, skills, and abilities critical for successful liaison work. This presentation will describe the journey the largest public and private universities in Connecticut have embarked on as they enhance their respective liaison programs. Design/Methodology/Approach

The authors planned a workshop that brought together fifty-six liaisons from both universities. Prior to the workshop participants were asked to complete a needs assessment survey based on the University of Minnesota Libraries Academic Programs Division Knowledge, Skills and Abilities Self-Assessment (“The Expert Library,” pp. 150-157) and read chapter 5 from the same book, “The New Liaison Librarian,” in addition to the Duke University Library Report “Engaging with Library Users.” The purpose was to focus liaisons’ attention on the changing roles and expectations of liaison work and the skills they need to successfully navigate these changes. Workshop activities explored the evolving roles, new challenges, changing organizational expectations, program review and revised job descriptions. The group and table discussions helped attendees identify the critical knowledge, skills and abilities if liaisons are to be viable partners in the research and learning processes. Findings The Needs Assessment results indicated “creating engaging and effective instructional materials; advising scholars on how they may manage their data; and possessing a basic understanding of copyright law” as the top three skills liaisons felt they needed to know more about to better support their constituents. The fact that these skills are not traditional to library work is indicative of evolving liaison roles and responsibilities. Practical Implications/Value The workshop experience generated interest in continued shared learning experiences including enhanced use of campus professional development resources and outside experts to cultivate skills needed for liaison work valued by faculty. Managers and liaisons at UConn and Yale can now use the results of this assessment to develop action plans for their respective organizations. These plan include focused training sessions, discussions dedicated to identifying priorities and strategies for program enhancement and improvement. The goal of these assessment activities include the revision of overall program and job descriptions relevant to current and future faculty research and teaching efforts that will cultivate strong faculty partnerships.

*Denise Hersey is the Librarian for Liaison Activities at the Cushing/Whitney Medical Library at Yale University. She initiated the “Librarian on Call” service which promotes librarians going to patrons’ work spaces to assist them with their needs. Recently, Denise has been charged with helping to coordinate liaison communication, training, and activities campus-wide. Francine DeFranco is Interim Assistant Vice Provost, Director for Library Research Services and Liaison Librarian to the Neag School of Education at the University of Connecticut Libraries. She has served as Team Leader of the Libraries’ survey team and has made numerous presentations on user surveys, assessment, and liaison roles and responsibilities, and co-authored the ARL Spec Kit on Evaluating Library Instruction in 2003.*

## **The Quality Maturity Model: Your Roadmap to a Culture of Quality**

Frankie Wilson (Researcher Librarian)

This paper presents the complete details of the Quality Maturity Model (QMM). The QMM provides a framework for libraries to self-assess their progress towards achieving a culture of quality. Librarians at the cutting edge of work on performance measurement and improvement have used the Quality Maturity Model during its development. The aim of this paper is to bring the details of the model to a wider audience, so they too can use it to make their improvement efforts more effective. A culture of quality is essential in enabling a library to adapt to meet the needs of future customers. A high quality library is able to meet, or even exceed, the needs of its customers. Such success comes (broadly) from focussing on quality as being defined by the customers. However, if a library does not have a mature culture of quality, then as the needs of the customers evolve the existing assessment and quality control processes may no longer be appropriate. The library is in danger of rapidly dropping from high to low quality. The Quality Maturity Model describes seven facets of quality culture: management of the organisation; learning organisation attributes; attitude to change; attitude to quality; leadership; investment in staff; and the alignment of all parts of the organisation (horizontal

and vertical) towards the mission, vision and values. For each of the facets there are five levels: 1 - ad hoc; 2 - repeatable; 3 - defined; 4 - managed; and 5 - continuous. A library with a strong and ubiquitous culture of quality will score at level 5 (continuous) for all facets. However, libraries that have not yet reached this utopia will score at different levels across the facets. The QMM enables libraries to locate themselves within the quality maturity landscape. They will then be able to use the Quality Maturity Model as a roadmap to plan their route to improvement. Such a strategic approach to improvement allows libraries to make sense of the literature in terms of what is appropriate for them, so avoiding expensive irrelevancies. After all, it is pointless trying to develop a balanced scorecard if your library does not have a strategic plan! The Quality Maturity Model is unique. There are other models that assess quality culture, but the details of these models are kept secret and the only way to be assessed is by paying the (large) consultancy fee. There are other models that make their details public, but they describe only one or two aspects of quality culture, not all. The QMM has been developed by a librarian for librarians. Because if you don't know where you are, a map won't help; and if you don't know where you are going, any road will do.

*Frankie Wilson is a UK Librarian researcher-practitioner interested in quality, performance measurement, organisational culture, and research methodologies. She developed the Quality Maturity Model for assessing the organisational quality culture of libraries. Following ten years as a faculty librarian at universities around London, she is now on a career break.*

## **One Size Doesn't Fit All? Harnessing Multiple Assessment Frameworks to Build the Value Proposition for the Organisation**

Meredith Martinelli (Macquarie University)

Jennifer Peasley (Macquarie University)

The Macquarie University Library quality framework was developed in 2007 and consists of a biennial client survey, a cycle of service improvement reviews and the ongoing review and assessment of statistical data. Whilst these mechanisms provide us with essential evidence they aren't capturing the value proposition that underpins the story of the Library. This proposition needs to be able to adapt to multiple audiences from communicating with our clients to presenting our strategic vision to the University. The opening of our new Library brings an ideal opportunity to review our assessment approaches in order to enhance our value proposition for the organisation. In July 2011 we moved to our new Library and the last 6 months of 2011 were focused on gathering information from our clients relating to their impressions and experiences of the new spaces and service provision. We have seen a significant increase in the physical and virtual use of our spaces, resources and services and yet our client surveys still evidenced the same feedback we have been receiving for the past 5 years - not enough powerpoints and more quiet study spaces! Considering that we have doubled the access to seating, computers and power points what assessment measures do we need to engage that will bring a more comprehensive picture of our value and highlight the key improvement areas that will ensure we are providing the services and support our clients require. In 2012 the Library will undergo a review as part of the University's Quality Enhancement framework ([www.mq.edu.au/quality/index.htm](http://www.mq.edu.au/quality/index.htm)). Within the broad parameters of the review there will be a specific focus on the "development of metrics around outcomes measures to demonstrate fitness for purpose, particularly in relation to benchmarking nationally and internationally". An integral part of this will be identifying opportunities to integrate the Library into University assessment. Macquarie University has taken the lead role in the development of a national Teaching Standards Framework [<http://teachingframework.com/tsftool/>] and the University Librarian participated in this development by drafting an initial evidence matrix to be used to assess Library Resource provision within this framework. This

paper will report on the progress of the 2012 Library Review, the integration of Library assessment in the Teaching Standards Framework and identify the quality framework that will support the measurement of value impact and allow us to tell our story more effectively.

*Meredith Martinelli is the Manager, Library Planning & Development at Macquarie University Library in Sydney, Australia. Having worked in public, academic and law libraries and as a specialist Library recruiter, her responsibilities include the Library's strategic planning and quality frameworks, HR and communications. For someone who 'never wanted to be a manager' this complexity ensures constant change and challenges. Jennifer Peasley is Deputy University Librarian at Macquarie University Library. Her role encompasses quality and planning, corporate services and IT and has recently included a major contribution to the development of a new library building and the review and restructure of Library services and staffing. Jennifer's interests include learning space design, quality assurance and evaluation, and the application of technology to improve library services*

## **Teaching and Learning I**

### **Utilizing Cross-Campus Collaboration to Improve the Assessment of Information Literacy**

Nisa Bakkalbasi (Columbia University)

Jason Kopp (James Madison University)

Johnathan Paulo (James Madison University)

Donna Sundre (James Madison University)

Stefanie Warlick (James Madison University)

Sara Williams (James Madison University)

Purpose With the technological advents of the past several decades, we have an unprecedented access to information. It is becoming increasingly important that students be able to interact with information in an efficient and reasonable manner. In other words, students today must possess a high degree of information literacy to research effectively. The Association of College and Research Libraries (ACRL) defines information literacy as "recogniz[ing] when information is needed and hav[ing] the ability to locate, evaluate, and use effectively the needed information" (ACRL, 2000, p. 2). This involves five standards: 1. Determine the extent of the information needed 2. Access the needed information effectively and efficiently 3. Evaluate information and its sources critically, [and] incorporate selected information into one's knowledge base 4. Use information effectively to accomplish a specific purpose 5. Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally (ACRL, 2000, pp. 2-3). Since their development, these standards have become nationally accepted, and a number of tests of information literacy have been aligned to these standards (e.g., iSkills: ETS, 2003; ILT: Wise, Cameron, Yang, & Davis, 2009). Approach An instrument specifically designed to assess information literacy at the graduating senior level was needed to assess library education efforts across the university. Thus, we began the development of

the Information Literacy Test for Seniors (ILT-S). We propose here a model for assessment design that involves collaboration from various departments across the university. We formed a tight network of liaison librarians involved in information literacy education, instructors from various majors, and assessment/measurement specialists. Each of these stakeholders played a key role in the development of the instrument. Liaison librarians provided deep content knowledge on information literacy, instructors from other departments gave valuable input regarding the skills they want graduating students to have, and assessment and measurement specialists contributed knowledge regarding the construction of tests. Members of these groups met often and worked together in the crafting of the multiple-choice items for the ILT-S. Findings The original pool of 55 multiple choice items was piloted with 390 students across two majors. Items showing poor item-total correlations within standard were eliminated, resulting in a 34-item instrument. This resulted in a sufficiently high overall reliability ( $\hat{I}\pm = .741$ ), with lower subscore reliabilities. Correlations between subscores were high, indicating that total scores should be reported. Importantly, seniors scored significantly higher on the instrument than underclassman (by 3.44 points). Practical Implications After just the first pilot of the ILT-S, the instrument produces reliable scores that can distinguish between students in meaningful ways. This is exceptionally rare in instrument design; it often takes years of piloting and revision to reach this point. We believe that the strength of the ILT-S is a direct result of the strong collaborative effort involved in its production. As such, we plan to expand this project to involve more majors across the university. We hope these results emphasize the importance of strong collaboration in the field of library assessment. References Association of College and Research Libraries (2000). Information Literacy Competency Standards for Higher Education. Chicago, IL: American Library Association. Educational Testing Service (2003). ETS Higher Education iSkills Assessment Fit with ACRL Standards. Available from ETS: [http://www.ets.org/Media/Tests/ICT\\_Literacy/pdf/acrl\\_standards.pdf](http://www.ets.org/Media/Tests/ICT_Literacy/pdf/acrl_standards.pdf) Wise, S. L., Cameron, L. Yang, S., & Davis, S. L. (2009). The Information Literacy Test (ILT): Test Manual. Available from Madison Assessment: <http://www.madisonassessment.com/uploads/ILT%20Test%20Manual%202010.pdf>.

*Nisa Bakkalbasi is the Assessment Coordinator at Columbia University Libraries. She previously served in a series of positions at James Madison University and Yale University Libraries. She holds a M.S. in Library and Information Science from Long Island University, a M.S. in Applied Statistics and a B.A. in Mathematics, from University of Alabama. Jason Kopp is a doctoral student in the Assessment and Measurement Program at James Madison University. His research focuses on utilizing statistical modeling to investigate various testing and measurement issues. He has been involved in the development of multiple psychological and educational instruments, including a measure of academic entitlement. Jonathan Paulo is the Education Librarian at James Madison University in Harrisonburg, Virginia. He received his MLIS from San Jose State University, and his B.A. from James Madison University. Jonathan is the liaison to five departments within the College of Education, as well as the Interdisciplinary Liberal Studies Program. Donna L. Sundre is the Executive Director for the Center for Assessment and Research Studies (<http://www.jmu.edu/assessment>) and Professor of Graduate Psychology at James Madison University in Harrisonburg, Virginia. Her research and publication areas include assessment practice, higher education policy, examinee motivation, instrument development, and validity issues. Stefanie Warlick is Assistant Director and Learning Commons Coordinator of the East Campus Library at James Madison University (JMU). Before taking on this role in 2011, Stefanie served JMU as the Health & Human Services Liaison Librarian. Stefanie obtained her MSLS from the University of North Carolina at Chapel Hill. Sara Williams is Assistant Director of Public Services at Carrier Library, James Madison University. She earned her MLS from Louisiana State University in 1982 and has been a subject librarian for various behavioral sciences departments at the University of Georgia, Tulane University and the University of New Orleans as well as JMU.*

## Library Faculty and Instructional Assessment: Creating a Culture of Assessment through the High Performance Programming Model of Organizational Transformation

Meredith Farkas (Portland State University)

Lisa Hinchliffe (University of Illinois, Urbana-Champaign)

**Purpose:** In an environment in which libraries increasingly need to demonstrate their value to faculty and administrators, providing evidence of the library's contribution to student learning through its instruction program is critical. However, building a culture of assessment can be a challenge, even if librarians recognize its importance. As coordinators of library instruction at institutions where librarians are also tenure-track faculty, in order to lead change, we must build trust and influence among our colleagues as well as garner support from administration for assessment initiatives. The purpose of this paper is to explore what it takes to build a culture of assessment in academic libraries as defined by Lakos and Phipps in "Creating a Culture of Assessment: A Catalyst for Organizational Change" (portal: Libraries and the Academy, 4:3, (2004), 345-361) in organizations where librarians are faculty; both at the administrative level and among the librarians. **Approach:** The analysis will be based on the literature around organizational change, student learning assessment in higher education, and barriers to assessment as a basis for determining what is needed to encourage library faculty to conduct meaningful assessment and use the results to inform their teaching and programmatic development. We will explore organizational change through the High Performance Programming model (see Nelson and Burns "High-Performance Programming: A Framework for Transforming Organizations" in Transforming Work: A Collection of Organizational Transformation Readings, Alexandria: Miles River Press, 1984) and discuss what librarians can do to lead change processes with library faculty. The analysis will be exemplified through case study of our own successes and challenges in building a culture of assessment and how we have applied what we have learned in our own leadership roles. **Findings:** The results of our analysis build on the findings of Oakleaf and Hinchliffe about barriers to assessment documented in "Assessment Cycle or Circular File: Do Academic Librarians Use Information Literacy Assessment Data?" (Proceedings of the Library Assessment Conference, 2008) and document strategies for overcoming barriers in the librarian faculty culture. In addition, the High Performance Programming model offers insights not only about overcoming barriers but also about approaches to capitalize on the strengths of the library faculty model as discussed by Hinchliffe and Chrzastowski in "Getting Started with Library Assessment: Using Surveys to Begin an Assessment Initiative" (Proceedings of the Library Assessment Conference, 2007). **Practical Implications/Value:** While most libraries are engaged in some assessment of instruction, the literature has shown that many are not using that assessment to inform their teaching, improve services or demonstrate value. Building a culture of assessment ensures that assessment practices are embedded in and integral to librarians' day-to-day work and this analysis points to strategies for overcoming barriers rather than being stymied by them. In addition, while thousands of librarians are faculty, there is relatively little literature that explores the organizational cultural dimensions of library faculty-ness (though there is a literature comparing library culture generally and campus faculty culture) and this paper will be a contribution to addressing that void.

*Meredith Farkas is an Assistant Professor and Head of Instructional Services at Portland State University, and also writes the monthly column "Technology in Practice" for American Libraries. Her research interests include leadership and management in libraries, assessment of student learning, and the impact of participatory technologies on scholarship and pedagogy. Lisa Janicke Hinchliffe is co-chair of the Association of College and Research Libraries' Value of Academic Libraries Committee and Associate Professor for Library Administration at the University of Illinois at Urbana-Champaign. Her research interests focus on assessment, performance measurement, information literacy, student learning, and professional development for academic librarians.*

## **Collaborating with Campus Assessment Services to Evaluate Information Literacy Skills of Graduating Undergraduates**

Irene Ke (University of Houston)

Christina Gola (University of Houston)

**Purpose:** During the 2010-2011 academic year, a group of librarians at the University of Houston (UH) Libraries teamed up with the UH Office of Assessment & Accreditation Services to conduct a campus-wide information literacy assessment of graduating undergraduate students. This collaborative effort involved development of an information literacy assessment rubric with faculty input. This paper describes the process of the collaborative effort, the advantages and the disadvantages of working with campus assessment services, and how the results were shared across campus and used to establish a benchmark for future assessment work. **Design/Methodology/Approach:** The assessment project evaluated a collection of graduating senior papers using a rubric developed by the librarians and the Office of Assessment, and modeled after rubrics developed by the campus writing center and faculty. The librarians normed the rubric with the support of the assessment expert, and then completed the rating of student papers. The results were collected and analyzed by the assessment office, and eventually shared among faculty. **Findings:** This collaboration provided many unique advantages, including faculty buy-in, assessment expertise, and access to students' academic products. The collaboration also helped raise the level of importance of information literacy assessment and led to faculty involvement. It ultimately led to a broad sharing of results that included high level university administrators. In addition, communication with Office of Assessment staff and faculty during the process provided insights on how information literacy is interpreted and taught in the curriculum. In conjunction, faculty and the assessment staff gained a much better understanding of how librarians contribute to the education on campus. **Practical implications/value:** Collaborating with campus units outside the library can help compensate for the lack of certain expertise in the library, such as assessment skills. Because the project involved members representing different constituencies on campus, the results led to broader impacts. This paper provides practical strategies for collaborating with assessment services on campus and describes the advantages and challenges of this type of collaboration.

*Irene Ke is the Psychology & Social Work Librarian at the University of Houston. She has worked in academic libraries for more than 12 years, and has worked collaboratively with faculty and staff on a variety of projects. Her current interest is in library service and instruction assessment and in using research data to make actionable plans. Christina Gola is the Head of Liaison Services for Instruction & Outreach at the University of Houston Libraries. She has seven years of experience coordinating library instruction and teaching information literacy skills. She developed and taught an undergraduate credit course focusing on practical web tools and information literacy. Her current interest is in standardized instruction practices and assessment.*

## **New Roles**

### **Too Much Assessment, Not Enough R&D**

Brian Mathews (Virginia Tech)

Academic libraries invest a lot of time, money, and effort into metrics. But does it work? Does it matter? Does it produce something useful? Does it encourage innovation? Does it nurture breakthrough, paradigm-shifting, transformative ideas? While assessment can lead to incremental improvements,

it doesn't necessarily lead to new services or new service models. Instead of assessment, we need to invest in R&D. We need to infuse the entrepreneurial spirit into our local efforts and into our professional conversations. R&D empowers us to move away from our niche and dabble in new arenas. R&D enables us to stake a claim in other parts of the scholarly enterprise, and to expand the role, value, and perception of libraries. This paper will introduce several R&D models and suggest how they could work in an academic library setting. Mini-case studies will be provided highlighting libraries that have experimented with the Lean Startup methodology (Build, Measure, Learn) as a means of imagining, developing, implementing, and improving services.

*Brian Mathews is the Associate Dean for Learning & Outreach at Virginia Tech. He previously worked as an Assistant University Librarian at UC Santa Barbara and as User Experience Librarian at Georgia Tech. Brian blogs at The Ubiquitous Librarian hosted by the Chronicle of Higher Education. His first book, Marketing Today's Academic Library, was published by ALA Editions. For more information please visit: [www.brianmathews.com](http://www.brianmathews.com)*

### **Assessing the Library's Grants Program**

Jamie McGowan (University of Illinois, Urbana-Champaign)

Beth Sandore (University of Illinois, Urbana-Champaign)

**Purpose:** Increasingly, academic and research libraries pursue and encourage grant-writing (Cuiller and Stoffle 2011, Mook 2004) to fuel innovation and research. While some institutions provide administrative and structured support to librarians, others lack the expertise or infrastructure to consistently support a grant program. In this analysis, we assessed seven years of sponsored research projects at the University of Illinois Library at Urbana-Champaign with the aim of understanding the research trends and themes over that period. Further, we sought to identify future research trends and corresponding support opportunities. Our goals included developing institutional research themes that intersect with funding priorities and agendas; demystifying the process of grant writing and project management through professional development programs and increased communication about funding successes; and bringing new faculty and academic staff into these processes. The review and analysis has proven valuable for the Library's institutional practices, and this assessment may also inform other institutions' initiatives around grant-writing.

**Design/Methods/Approach:** The authors performed a multi-step assessment of the University Library's grant-seeking : 1) establish a baseline of data on funded grants; 2) identify the motivations for pursuing grants and the obstacles that library professionals face in the process; 3) establish a stronger support structure based on feedback gathered, and through collaborations with other groups that support the research process; and 4) identify strategic research themes that leverage local strengths and address institutional priorities. Analysis of Library data on externally funded grants from the University's Proposal Data System provides insight into the trends, themes, outliers. Secondly, we had informal conversations with key stakeholders and principal investigators at the University Library. Thirdly, we sought to provide effective internal support in the proposal preparation process, including help with budgets, support documentation, and review of narratives. Lastly, we collaborated with the Library Research and Publication Committee to support forums to engage more Library professionals in initiating grant proposals.

**Findings:** Several key findings emerged from this assessment. We identified trends in grant funding throughout the University Library, and areas where the Library is positioned to enhance grant efforts. Library faculty and staff identified core organizational issues that were perceived as obstacles to

pursuing external funding to support research and innovative service development. The analysis revealed that faculty view grant opportunities as having extraordinary value within their careers and for the institution. Finally, this work revealed a need for the Library to cultivate an up-and-coming cadre of faculty and professional staff who can transform key research questions into compelling proposals. As

part of this effort, the fourth phase of our research involves the development of professional forums aimed at faculty and staff who are interested in and ready to pursue external funding.

**Practical Implications/Value:** As a focused case study this can serve as a model to other academic and research libraries interested in two things: 1) identifying institutional research themes based on strategic goals and resident strengths; and 2) developing a systematic approach to supporting grant-writing by librarians and other professionals in the organization.

*Jamie McGowan is a research assistant in the Office of Library Information Technology Planning and Policy in the University of Illinois Library at Urbana-Champaign and is pursuing an M.S. in library and information science. She provides foundation, grants, and community research support. She also has written many successful internal and external grants. Beth Sandore Namachchivaya is associate university librarian for information technology planning and policy, associate dean of libraries, and professor at the University of Illinois Library at Urbana-Champaign. She leads library programs that focus on discovery services, digital libraries, eResearch, and digital curation. Her research interests key on the design and evaluation of digital library services that enable effective user discovery, management, and curation of content.*

## **Is Experience the Best Teacher? Field Experience and Student Learning in LIS Education Programs**

Susan Searing (University of Illinois, Urbana-Champaign)

Scott Walter (DePaul University)

Tanner Wray (University of Maryland)

A. Purpose “Library experience is as important in getting hired by a library as the MLS, maybe even more so.” In his 2005 essay, “The Practice Prerequisite,” Library Journal’s John Berry argued that professional education programs in Library and Information Science (LIS) must provide structured opportunities - through practicums, internships, graduate assistantships and the like - for students to complement their coursework with workplace experience. Berry may have based his conclusion on the persistent identification of the field experience as “crucial to job success” by respondents to the magazine’s annual placement and salary survey. The fieldwork component of LIS education, Berry stated, should be developed collaboratively by librarians and LIS educators in order to bridge the gap between theory and practice and strengthen connections between faculty members and library managers. Berry’s view is a common one; library employers take it on faith that field experiences produce better prepared entry-level librarians. But how do we really know that? What, specifically, are the learning outcomes to which field experiences contribute, and how do these contribute to professional success? How can we maximize the benefit of the field experience for both the student and the library? In a recent study of emergent needs in the preparation of future academic librarians, Berg, Hoffman, & Dawson (2009) noted that “the creation of successful and meaningful field experiences for library students has been a consistent challenge” since the origins of LIS education over a century ago. As Lyders & Wilson (1991), Howden (1992), and McClellan (1995) found, prevailing practice is characterized by multiple forms of field experience; students’ lack of information about

their options; unclear connections between field experiences and the content of LIS courses; and lack of communication between LIS educators and librarian site supervisors regarding the design and evaluation of student work. To lay the foundation for addressing these problems, librarians and library educators at the University of Illinois, Urbana-Champaign, the University of Maryland, and the University of Washington are collaborating to gather the perceptions of recent LIS graduates who completed a field experience as part of their pre-professional education and to assess the impact of those experiences on student learning.

**B. Design/Methodology/Approach** This study is applying a mixed-method approach: 1) a content analysis of student learning outcomes identified by ALA-accredited LIS programs; and 2) a survey of recent LIS graduates regarding their field experience in academic libraries.

**C. Findings** The findings of this study promise to illuminate the concrete contributions made to student learning outcomes in LIS education programs by field experiences in academic library settings.

**D. Practical Implications** As part of the broader “Field Strength” project sponsored by the Institute of Museum and Library Services, this study will identify best practices for field experiences in academic libraries. Further, by developing assessment strategies grounded in learning outcomes, this study will promote more effective collaboration between academic libraries and LIS education programs and will document the contributions of academic librarians to the vital pre-professional training of LIS students through assistantships, practicums, internships, and other opportunities.

*Susan E. Searing is Library & Information Science Librarian at the University of Illinois at Urbana-Champaign, and holds a joint appointment in the Graduate School of Library & Information Science. She has taught as an adjunct in the LIS programs at the University of Wisconsin-Madison and the University of Illinois, Urbana-Champaign. Scott Walter is University Librarian at DePaul University. He has held faculty appointments in the University Library and the Graduate School of Library and Information Science at the University of Illinois at Urbana-Champaign and in the School of Library and Information Science at San Jose State University. Tanner Wray is the Director of Public Services at the University of Maryland Libraries. Prior to being Director, he held positions at UW-Madison, George Washington University, two national libraries, and the Centers for Disease Control.*

## **Plenary Session II**

### **Library Assessment and Big Data: The Need for Ethical, Legal and Philosophical Analysis**

Siva Vaidyanathan (Robertson Professor and the Chair of the Department of Media Studies, University of Virginia)

While the benefits of the scientific and information communities making a bold step toward facilitating “Big Data” research in the natural and technical sciences are clear, the “human sciences” offer a unique opportunity to fuse the study of the law, policy, and ethics surrounding the collection, preservation, indexing, analysis, and dissemination of data sets. Questions about privacy and intellectual policy implications of Big Data research are complicated and demand input and deliberation among many different types of scholars. Even more interesting, Big Data offers us an opportunity to examine the very nature of knowledge both historically and instrumentally. As universities, foundations, and federal agencies increase funding opportunities for Big Data research, each initiative should be bound to a research project examining the cultural, intellectual, and societal implications of such work.

*Siva Vaidhyathan is a cultural historian and media scholar, and is currently the Robertson Professor in Media Studies at the University of Virginia. From 1999 through the summer of 2007 he worked in the Department of Culture and Communication at New York University. Vaidhyathan is a frequent contributor on media and cultural issues in various periodicals including the Chronicle of Higher Education, New York Times Magazine, The Nation, and Salon.com, and he maintains a blog, [www.googlizationofeverything.com](http://www.googlizationofeverything.com). He is a frequent contributor to National Public Radio and to MSNBC.COM and has appeared in a segment of "The Daily Show" with Jon Stewart. Vaidhyathan is a fellow of the New York Institute for the Humanities and the Institute for the Future of the Book. In 2011 he was appointed chair of UVA's Department of Media Studies.*

## Space

### **TEALS (Tool for Evaluation of Academic Library Spaces) Project: Evaluating Physical Library Spaces**

Neda Abbasi (Deakin University)

Hisham Elkadi (Deakin University)

Anne Horn (Deakin University)

Sue Owen (Deakin University)

The aim of TEALS project was to establish a setting for evaluation of academic library spaces. The outcomes of such evaluation were anticipated to provide insights into the impacts of library spaces on students' learning experiences, faculty's teaching and research and lead to identifying the area of weakness and strength, developing improvement plans and defining specific goals and means for project decision-makers. TEALS was developed in three phases. In the first phase of Exploratory Research, the research and practice of library planning and design along with the existing library assessment tools were reviewed. In addition, eleven academic libraries in Australia were visited. The literature review and site visits helped in identifying ten evidenced-based Criteria of Quality (CoQ) for effective and responsive library spaces. The ten key categories of CoQ for TEALS were 'Positive Image & Identity', 'Inviting & Welcoming Nature of Entry', 'Functionality & Efficiency', 'Flexibility & Adaptability', 'Variety of Spaces Supporting Different Users & Uses', 'Social & People-Centred Spaces', 'Sense of Place & Inspiration', 'Environmental Comfort & Sustainability', 'Accessibility, Safety and Security' and 'Integration of Technologies'. The CoQ were then linked to a number of Quality Indicators (QIs) and formed the basic elements of the TEALS framework. This meant that when an academic library is evaluated using TEALS, the library spaces are measured and scored against the QIs. TEALS also included three types of data collection tools - Students' Library Experience Survey, Observational Study Checklist and Library Staff's Perception Survey - which facilitate scoring. In the second phase of Pilot Study, TEALS package was trialled in Deakin University Library at Burwood campus, Melbourne, Australia. This trial of TEALS package proved to be an obvious success providing critical information on the quality of library spaces, students' experiences and levels of satisfaction with these spaces and the library staff's perceptions. The evaluation process was also found to be relatively straightforward and user-friendly. Finally, the findings of the pilot study helped in improving the package including modifications to the online survey instrument of Students' Library Experience and development of a survey instrument for library staff and the final launch of TEALS. The TEALS package will soon be used to evaluate Deakin University libraries at two other campuses. Enhanced versions of TEALS will also be further applied to conduct ongoing

assessment of existing library spaces and any spatial transformation in the future. Development of TEALS package made important contributions to filling the gap in appropriate evaluation methods which can provide support for long-term decision-making about academic libraries. TEALS adopted a participatory approach to space evaluation and its data collection tools facilitated engagement of students and library staff in the process of assessing the physical library. Developed to act as a reflective tool, the TEALS package is hoped to be used at different stages of a library's life with little adjustment. This will certainly assist libraries in performing ongoing evaluation and reflecting upon the implementation of changes, reviewing the effectiveness of the programs and comparing space utilisation over years.

*Dr Neda Abbasi is a Research Fellow in Deakin University. Her research interest lies within the field of planning, design and evaluation of learning environments. She has practiced as an architect and been involved in design and planning consultation and research projects in the University of Melbourne and New Learning Environments, Rubida Research. Professor Hisham Elkadi is the Head of School, Architecture and Building in the Faculty of Science and Technology. His academic career includes being a research coordinator in Plymouth, Director of undergraduate programme and a Director of postgraduate studies in the University of Newcastle and Head of School of Architecture & Design, Belfast. Anne H. Horn is the University Librarian & Executive Director, Academic Support at Deakin University. Deakin is a large, comprehensive Australian University. Anne provides high level advice to the University on access to scholarly information, academic support services and research repository management. Sue Owen is the Associate University Librarian, Client Services at Deakin University, Australia. Sue has directed a program of strategic reform and renewal of library services and online spaces initiating high level client-focussed support to academics, undergraduate and postgraduate students, researchers and doctoral candidates.*

## **Practical Research for Library Space and Service Design**

Bertha Chang (North Carolina State University)

Honora N. Eskridge (North Carolina State University)

As academic libraries increasingly focus on user experience as a means of improving spaces, services, and collections, more librarians find themselves conducting studies of varying complexity to provide data supporting decisions. In 2010, the NCSU Libraries began construction of a new library building. Slated to open in January 2013, the James B. Hunt, Jr. Library is meant to redefine the library of the 21st century in terms of services, technology, and learning spaces. The Hunt Library will serve Centennial Campus, which is home to university departments and centers, as well as corporate and government partners. The Colleges of Textiles and Engineering are anticipated to be the primary academic user communities for the new library. Hunt will offer a variety of technology-rich learning spaces, including dedicated commons spaces for both faculty and graduate students. To help with the planning and design of these spaces, the Libraries conducted a study to better understand the needs of these two populations in terms of work spaces and library resources. This paper will summarize this study's methodology, key findings, and practical use in the planning of Hunt Library spaces and services. A series of interviews was undertaken in Spring 2011 with 40 faculty members and 31 graduate students in which interviewees were asked about their current work or study habits, frequently used work spaces, library resources and technology used, and spaces and resources that would be beneficial but which were currently lacking. Transcripts of the interviews were analyzed to enrich our understanding of how library spaces are used and to determine needs and gaps with respect to spaces and services. A second set of interviews was completed in Spring 2012 with an additional eight graduate students in order to include master's degree students, a group that had not been well represented in the first round. This additional data is currently being analyzed. This study

has identified a number of specific activities that graduate students and faculty are engaged in and the corresponding types of library spaces that are needed. This information has helped planning teams in making both big and small decisions for the new library building. The interview data was also used to create user personas, fictional characters that embody a particular user need or set of needs. Personas help staff and administrators get past personal anecdotal experiences of the user and instead build a shared understanding that is based on real data. Four faculty and two graduate student personas were developed using the research data. These personas were then used by the Hunt Library planning teams as a common touchpoint when discussing the user and especially when envisioning users interacting with staff, services, and spaces. This paper will detail the persona creation process as it was adapted to an academic library setting.

*Bertha Chang is currently a Libraries Fellow at the NCSU Libraries. She holds an MS from the Graduate School of Library and Information Science at University of Illinois at Urbana-Champaign and a Ph.D. from the Department of Materials Science and Engineering at the Massachusetts Institute of Technology. Honora Eskridge is currently Director, Centennial Campus Research Services at NC State University where she leads library services to the engineering community and is Director of the Burlington Textiles Library. She holds an MLIS from The Catholic University of America and a Bachelor of Engineering from Manhattan College.*

## **Designing and Assessing Library Services**

Elliot Felix (Brightspot Strategy)

**PURPOSE** We aim to close the two gaps that limit our libraries: services are often designed separately from spaces and design is generally thought about as separate from assessment. The purpose of this paper is to call attention to these gaps and then to offer new approaches and tools for integrated planning and assessment. Space and services within libraries are often designed separately today - not surprisingly since they have separate budgets, are controlled by different departments, and develop on different timelines. Popular assessment instruments such as LibQUAL+® assess services in limited ways like access to information and service affect (e.g.: empathy, responsiveness, assurance). This despite the movement for libraries to be more than their information and customer service. How can libraries solve the problems of siloed space and service design processes and antiquated assessment? Building on the author's article entitled "Learning Space Service Design" in the Journal of Learning Spaces, brightspot has been working with 3 institutions to use user-centered tools and methods that enable an integrated design process for spaces and services that can in turn be used to assess services.

**METHODOLOGY** The aforementioned article introduces the mindset and toolkit of the maturing field of service design and proposes them as building blocks of an integrated planning process - closing the gaps between space and services and between design and assessment. These tools include: Service Visioning, Personas, Customer Journey Maps, Service Blueprints, and Service Prototyping. Several of these have been developed and described within the Learning Space Toolkit, which brightspot is co-developing. These tools - coupled with the mindset of user empathy, iterative design, and participatory planning - can be used to design services within spaces as well as assess services once implemented. We have worked to apply this with NC State University, Stanford University, and Liberty University. Our session will provide an overview of the tools and process by discussing these 3 institutional case studies and reporting on the process and lessons learned. We will also invite community input on the tools/approach and on ideas to advance the sophistication of assessing services.

**FINDINGS** We will discuss our findings from two related endeavors: first, the broad literature review and research that went into the aforementioned "Learning Space Service Design" article, and secondly, our work with institutions in teaching their staff service design tools and methods and their use of the mindset and toolkit to design and assess services. A sampling of these findings include: Shortcomings of typical design processes and assessment techniques Techniques for learning from other

institutions and other industries Lessons learned in teaching design methods to “non-designers” The importance of iterative process, prototypes, and pilots to solving problems and getting users and staff on-board VALUE The value of the session will be to: Draw attention to short-falls in typical design and assessment processes/tools Provide institutions with concrete tools and methods they can use to integrate design with assessment and services with spaces

*Elliot Felix is the Director of Brightspot Strategy. He designs services, spaces, and organizations to enable better learning experiences. Elliot is an experienced strategist, skilled facilitator, and gifted sense-maker who has led projects for companies like Google and Microsoft and institutions like UVa, NC State, Stanford, NYU, and SFMOMA.*

## **Multidisciplinary Rethinking and Redesign of Library Space**

Patricia Steele (University of Maryland)

Nancy Fried Foster (University of Rochester)

In the summer of 2010, the dean of the University of Maryland’s library system began a project to renovate the main library on the College Park campus. After years of piecemeal updates, McKeldin Library had become a charmless, confusing and inefficient building in which library staff labored to meet the many information needs of students, faculty members and the public. The dean’s decision to engage a number of experts – the dean of the architecture and information schools, a practicing architect, a design anthropologist, and a professor of anthropology – set in motion a participatory process to which numerous students, staff and faculty members provided crucial information and in which graduate students played important roles in defining the program and drawing plans for a re-envisioned library. This paper will summarize the activities that built the informational basis for the quantitative program and qualitative requirements and present designs based on this information that were developed by graduate students in a studio course. It discusses the ways in which the project is both participatory and collaborative, and why we think this approach is both valuable and replicable.

*Patricia A. Steele is Dean of Libraries at the University of Maryland and was formerly the Ruth Lily Dean of University Libraries at Indiana University. She envisioned this broadly collaborative project to redesign McKeldin Library and worked with others on campus and elsewhere to make it happen. Nancy Fried Foster, the consultant to UMD for this project, is an anthropologist and the Director of Anthropological Research at the University of Rochester’s River Campus Libraries. She co-edited the very influential 2007 book, *Studying Students: The Undergraduate Research Project at the University of Rochester*.*

## **Teaching and Learning II**

### **Project RAILS: Rubrics, Results, & Recommendations**

Megan Oakleaf (Syracuse University)

Jackie Belanger (University of Washington, Bothell)

Jenny Rushing Mills (Belmont University)

Purpose: Rubric Assessment of Information Literacy Skills (RAILS) is an IMLS-funded research project investigating an analytic rubric approach to information literacy assessment. RAILS helps academic librarians and disciplinary faculty assess information literacy outcomes exhibited in “artifacts of student learning” including research papers, presentations, worksheets, portfolios, and reflective journals. Using the AAC&U VALUE rubrics and the Information Literacy Competency Standards for Higher Education as starting points, RAILS has yielded a suite of rubrics that can be used by librarians and faculty to assess information literacy outcomes; a transferable model for analyzing rubric scores; training materials for librarians who seek to use rubrics for information literacy assessment; indicators of rater expertise in rubric scoring; and a clearinghouse for librarians and faculty to share local adaptations of IL rubrics, rubric assessment results, and improvements to instructional strategies and services made on the basis of those results. Although RAILS addresses practical assessment issues, it also explores the answers to several research questions: Can librarians & faculty use IL rubrics to provide valid & reliable scores of student learning? What skills/characteristics do librarians & faculty need to produce valid & reliable scores using IL rubrics? What training materials do librarians & faculty need to acquire these skills/characteristics? How can rubric assessment be used to improve IL instruction and increase student learning of IL skills? Design/Methodology/Approach: The RAILS research design is a multi-step process. Learning outcomes are defined by AAC&U and ACRL and described using a rubric format. Librarians from each participating institution engage in rigorous rubric training, tailor information literacy rubrics to their individual campus contexts, collect student learning artifacts for scoring, and collaborate with colleagues as raters. Raters are normed and then score student artifacts; raters also complete surveys about their rubric scoring experience. Rubric scores are subjected to statistical analysis, as are rater surveys, and tentative conclusions are drawn. This process was followed at 5 institutions during the first year of the grant, and the lessons learned were applied at 5 more institutions during the second year of the grant (in process now). Findings: RAILS rubrics have been studied at 10 institutions. Primary findings describe student performance on the rubrics, answering the question, “Where do students fall on a continuum of performance levels on a given learning outcome described by a particular information literacy rubric?” Results include interrater reliability data, revealing the degree to which librarians and faculty can come to consensus on assessments of information literacy learning. Cumulative RAILS data provides insight into best practices for developing information literacy rubrics, norming raters, and selecting statistical analysis approaches. This presentation also includes “lessons learned” by individual librarians who participated in the RAILS study during the 2010-2011 and 2011-2012 academic years. Practical Implications/Value: RAILS offers insights into student information literacy skills, the use of rubrics as assessment tools, librarians and faculty as raters of student artifacts, statistical interrater reliability measures, and the use of assessment data to “close the loop.” All these areas can be applied to practice in libraries and on campuses nationwide.

*Megan Oakleaf is an Assistant Professor in the iSchool at Syracuse University. Her research areas include assessment, evidence-based decision-making, and information literacy instruction. She is the author of the Value of Academic Libraries Comprehensive Review and Report. Previously, Megan served as Librarian for Instruction and Undergraduate Research at NC State University. Jackie Belanger is a Research & Instruction Librarian and Campus Library Assessment Coordinator at the University of Washington Bothell and Cascadia Community College (a library serving both institutions on a co-located campus). She was the lead librarian for UW Bothell’s 2011 participation in the RAILS project. Jenny Rushing Mills is the Coordinator of Reference Services at Belmont University in Nashville. She also coordinates the information literacy program for general education and serves as liaison librarian to the health science programs on campus. She was the lead librarian for Belmont’s 2011 participation in the RAILS project.*

## **Impact of Library Instruction in Different Academic Disciplines: An Analysis of Student Transcripts and Course Syllabi**

Melissa Bowles-Terry (University of Wyoming)

**Purpose:** The purpose of this paper is to examine the connection between student academic success and information literacy instruction in different academic majors. It follows up on a study that established a positive correlation between upper-division library instruction and higher grade point average (GPA) at graduation (results published in *Evidence Based Library and Information Practice*, 2012), taking a closer look how the average GPA of graduates in majors that integrate library instruction and research-intensive assignments differs from that of graduates in majors within the same college without library instruction. **Design/Methodology/Approach:** An analysis of 4,489 academic transcripts of graduating seniors identified differences in GPA between students with different levels of library instruction. The author analyzed the academic transcripts of students who entered the university between 2005 and 2007 and who graduated between 2006 and 2011, excluding graduate and professional students. The author created a database to compare transcript data with records of library instruction sessions and sorted students into groups, based on how many library instruction sessions the student attended and at what curricular level the sessions were offered. The group with no library instruction was closely examined and 12 majors were identified as having the least library instruction. The author compared the mean GPA of students in these majors to the mean GPA of students in the group of graduates who had library instruction in upper-division courses within the same college. The author will also analyze learning outcomes and syllabi in majors that lack library instruction in order to identify possible courses that librarians could target for future information literacy instruction. **Findings:** The initial study found a statistically significant difference in GPA between graduating seniors who had library instruction in upper-level courses (defined in this study as post-freshman-level) and those that did not. This follow-up study finds that in majors that are less likely to include library instruction and research-intensive assignments, the mean GPA at graduation is 3.194, which is significantly lower than the overall mean GPA for students who receive upper-level library instruction, 3.289. (Following common statistical practice, the level of significance was set at 0.05.) **Practical Implications/Value:** On an institutional level, this study provides librarians with more information about academic programs not utilizing library instruction services. In a broader application, it applies lessons learned from *Academically Adrift* (Arum and Roksa, 2011) to libraries and information literacy instruction. The much discussed findings of *Academically Adrift* suggest that students who major in humanities, social sciences, science, and math out-perform students majoring in business, education, social work, and other fields on the College Learning Assessment (p. 104). This paper explores what role information literacy instruction may play in the academic success of students in those majors.

*Melissa is the Instruction and Assessment Coordinator in the Research and Instruction Services Department at University of Wyoming Libraries. Her research areas include assessment of student learning and information literacy instruction.*

## **Rolling it up: The Evolution of an Information Literacy Assessment Plan**

Elizabeth Dolinger (Keene State College)

**Purpose** A tiered assessment model was developed, rolling up multiple layers and assessment methods, in order to capture the library's contribution to the development of student's information literacy and to more explicitly reflect the development of information literacy that occurs throughout a student's academic career in and out of the classroom. **Approach** In 2007 Information

Literacy was identified as an intellectual skills outcome of the new general education program, the Integrative Studies Program (ISP), at Keene State College. Toward the effort of benchmarking students' information literacy, for three years, the library administered the SAILS test. However, the contribution of the librarians to the development of information literacy was not adequately assessed via SAILS and student feedback forms. The curriculum map of the ISP program also did not reflect the courses where information literacy was being developed. During the 2011 fall semester, librarians implemented a common information literacy curriculum across all sections of two first year courses. The curriculum was designed to address challenges of not knowing what skills were being taught and of students receiving different experiences across sections of the same course. By developing the common curriculum librarians engaged in conversations about student learning outcomes, teaching pedagogy, and assessment. A two-tiered assessment plan was designed to capture the contribution of librarian instruction to the development of students' information literacy, as well as the information literacy development that occurs throughout a student's academic career. In the first tier, campus assessment of information literacy, strategies have included the SAILS test but are now focused on rubric assessment of student work from different levels of the ISP program. In the second tier, assessment of the Mason Library's Information Literacy Program, strategies include methods such as performance assessments and the collection of data on the sessions taught. Findings The rolling up of assessment results provides a big picture analysis of information literacy learning outcomes and contributes to the identification of information literacy outcomes throughout the college curriculum. By reviewing artifacts from information literacy sessions using a common rubric the librarians identified their expectations of student learning. Librarians recognized that they needed to be more explicit in their instruction and began to focus more on developing critical thinking than on instruction of tools. The volume and variety of performance assessments collected by librarians was unwieldy. Many librarians did not have time to assess artifacts. Development of a common performance assessment for high volume courses alleviates librarians challenged with having enough time to assess or create performance assessments. Implications Developing a common core curriculum can help implement an assessment plan. It facilitates development of a community of practice and serves as a training ground to learn outcomes based teaching and assessment methods. Designing assessment in two tiers allows libraries to capture a dynamic picture of information literacy development throughout a college curriculum including the contribution of the library to the development of student's information literacy.

*Elizabeth Dolinger is the Information Literacy Librarian at Keene State College. She works to develop an integrated information literacy program and provides leadership in the development, promotion, assessment, and teaching of information literacy. She is interested in the development of critical literacies, integrative approaches to program development, and inclusive instruction.*

### **Assessment of Information Literacy as a Student Learning Outcome: Overcoming Barriers and Achieving Standards**

Laura Saunders (Simmons College)

Megan Oakleaf (Syracuse University)

Purpose Stakeholders in higher education across the country-including students, parents, research and policy organizations, and government agencies-are demanding greater accountability and transparency from institutions of higher education in how they are promoting quality and improvement in learning. Indeed, as the cost of tuition rises, colleges and universities as well as the organizations which accredit them are coming under increased scrutiny. Information literacy-defined as the ability to locate, access, evaluate, and use information-is linked to critical thinking and lifelong learning, and as such is an essential learning outcome directly related to students' academic

success. By defining and assessing learning outcomes for information literacy at the course, program, and institutional levels, institutions can document student progress, use data to improve learning, and offer evidence of student achievement. Academic libraries can use such evidence to better align themselves with institutional missions and goals. Design This paper integrates the research of the two authors to present an overview of the current state of information literacy programs on campuses nationwide, identify barriers to the integration of information literacy at the program level, and offer a framework to facilitate and promote assessment of learning outcomes for information literacy in academic libraries and institutions of higher education. The research includes a nationwide analysis of self-study documents completed for decennial accreditation review supplemented by case studies of campuses identified as having robust programs, which constitutes the overview of how institutions of higher education are responding to demands for accountability and transparency by implementing and assessing learning goals for information literacy. The framework for facilitating further assessment of information literacy grows out of research into the development, testing, and implementation of assessment tools, especially rubrics designed to define learning outcomes for information literacy at a granular level and enable accurate and objective assessment of progress toward those learning goals. Findings The research demonstrates while teaching faculty and high-level administrators generally agree on the importance of information literacy, librarians face significant barriers to integrating its instruction and assessment beyond the course level. In order to generate more buy-in from faculty and administrators, librarians must learn to use assessment data to produce evidence of library contributions to student learning and to better align library activities with institutional goals and outcomes. Practical Implications The findings and recommendations of this research offer academic librarians valuable insight to better align their instruction and assessment activities with the educational outcomes of their institutions and, by extension, external stakeholders such as accreditation organizations, government agencies, students, and parents. Further, this paper will include practical advice for developing and enhancing information literacy programs by presenting a framework to further collaboration with teaching faculty and facilitate the assessment of learning outcomes for information literacy. Ideally, this framework will help academic librarians integrate information literacy into the curricula beyond the course-level so learning outcomes associated with information literacy might be assessed at the program level.

*Megan Oakleaf Megan Oakleaf is an Assistant Professor in the iSchool at Syracuse University. Her research areas include assessment, evidence-based decision-making, and information literacy instruction. She is the author of the Value of Academic Libraries Comprehensive Review and Report. Previously, Megan served as Librarian for Instruction and Undergraduate Research at NC State University. Laura Saunders Laura Saunders is an Assistant Professor at the Simmons College Graduate School of Library and Information Science, specializing in information literacy, assessment, and reference services. Her book, "Information Literacy as a Student Learning Outcome: The Perspective of Institutional Accreditation" was published in 2011.*

## **User Assessment & Behavior**

### **Collaborative Ethnographic Needs Assessment of Doctoral Students in the Humanities**

Damon Jaggars (Columbia University)

Kornelia Tancheva (Cornell University)

In recent years a number of major studies have focused on the high attrition rates for doctoral students in the humanities, including the Council of Graduate Schools Ph.D. Completion Project, the Andrew W. Mellon Foundation's Graduate Education Initiative, and the National Research Council Assessment

of Research Doctoral Programs. Results from these studies reveal a significant gap in degrees awarded between the humanities and other disciplines. In addition, time to completion is longer in the humanities than other disciplines and the completion rate within a ten-year period is the lowest in the humanities among the disciplines studied. Oft-cited factors that influence time to completion and retention rates for doctoral students include discipline specificity, institutional characteristics, availability of financial aid, quality of advising, clarity of program requirements, quality of family life, job prospects, lack of community, etc. None of the studies consulted specifically considered the role of the library, though it is often characterized as the humanist's equivalent to the scientific laboratory. Our collaborative study, supported by grants from the Gladys Krieble Delmas Foundation, the Council on Library and Information Resources, and funding from the respective Graduate Schools at Cornell and Columbia, consisted of five focus groups and 45 in-depth interviews with doctoral students in the humanities at both Cornell and Columbia. Using ethnographic research methods, we investigated whether the library could positively impact completion and attrition rates in doctoral work, and specific strategies it might employ to better support doctoral students in the humanities at our institutions. Though we will briefly describe methods and key findings, which have been reported elsewhere (see <http://www.clir.org/pubs/ruminations/02cornellcolumbia>), our paper will focus on examining the process of conducting a collaborative ethnographic study across two universities and their respective research libraries. We will discuss the collaborative processes of planning and managing the study, of creating and refining instruments, of conducting focus groups and interviews, and of analyzing data and creating meaning - all while working in theme-based collaborative teams spanning two research library organizations. We will discuss what within the collaborative process worked well and what in hindsight we would have done differently. Our goal is to examine our successes as well as the challenges teams faced and suggest best practices for future cross-institutional collaborative assessments.

*Damon Jaggars is Associate University Librarian for Collections and Services at Columbia University Libraries/Information Services. Current research interests include service quality assessment and emerging service models for research and teaching support. Kornelia Tancheva is the Director of Olin and Uris Libraries and the Library Annex at Cornell University. She teaches classes in drama, theatre, and ESL. Her research interests include modernism in drama and theatre, human-computer interaction, theatre in the Internet age, and qualitative and quantitative assessment of library services.*

### **Increasing the Impact & Value of a Graduate Level Research Methods Course by Embedding Assessment Librarians & Library Assessment**

Kirsten Kinsley (Florida State University)

Rachel Besara (Florida State University)

Purpose Two librarians at the Florida State University (FSU) Libraries' were conducting a user study using ethnographic interviewing techniques and were looking for subjects from each of the departments on campus to recruit for their study. At one of the departments, a professor who taught a graduate-level research methods class heard about what they were doing and realized that the ethnographic research methods being used by the librarians were similar to those being taught to the students in her class. Upon meeting the librarians, she also realized that they had something to offer her students by inviting the librarians to teach how to conduct interviews and to provide a chance for students to interview subjects as a part of the FSU Libraries' user study. This professor saw a unique opportunity to collaborate and integrate her learning objectives to "get these students involved in some real research while they are also learning about it in theory." Methodology Librarians gave two in-class training sessions in the spring 2012 on ethnographic interviewing and transcription

techniques. Students were required to take a human subjects certification training online and sign a confidentiality agreement prior to going out to interview. This was followed by a live-recruiting session in the science library where students were assigned to observe an interview modeled and conducted by a librarian while they took notes. Immediately following that, the graduate student switched to the role of interviewer and the librarian became the note-taker and observer to give feedback to the student about their interview. Lastly, students attended a brief class transcription training session taught by the librarians before they transcribed their interviews. Students were given two class assignments. One was to write a reflection paper about the interview experience and the second was to write a reflection paper about the transcription process. The professor also wrote a reflection paper on the collaboration with the library and its impact on students. Findings At the end of the class, the students' and the professor's reflective papers on the interview and transcription experiences were analyzed. Themes that center on the process of interviewing and transcribing data were extracted. Practical Implications and Value Practical and sustainable benefits from this symbiotic, embedded course collaboration are evident. Librarians received free and motivated assessment labor with twenty-two interviews completed in approximately two weeks. The students benefited from having an applied learning experience. The professor got the benefit of integrating theory taught in the classroom with the application taught by the librarians in the field. Librarians could become embedded in the instruction of research methods courses for multiple disciplines, especially in the social sciences. As consultants providing "real-life" ethnographic experiences, we can broaden library instruction from teaching information gathering and synthesis, to teaching data collection and project management skills for individual research projects, thus increasing our value to the overall teaching and research mission of the university.

*Kirsten Kinsley is an Assessment Librarian at the Florida State University (FSU) Libraries in Tallahassee, FL. Her interests include conducting user-centered assessment and fostering library and campus collaborations. Kirsten is currently co-leading two large ethnographic studies on FSU STEM and graduate populations. Rachel Besara is an Assessment Librarian at the Florida State University (FSU) Libraries in Tallahassee, Florida. She is currently co-leading two large ethnographic research studies of the academic work behaviors and needs of the FSU STEM population and graduate students. Rachel is also the current Chair of LLAMA MAES.*

## **Student Information Seeking Behaviors: A Case Study in Collaboration**

Allyson Washburn (Brigham Young University)

Sheila C. Bibb (Brigham Young University)

Have you heard librarians happily discussing the use of ethnographic methods to study their users, and wanted to attempt a similar project, but lacked the manpower, financial resources, or basic skills necessary to do it successfully? In this presentation we will explore ways in which you can overcome these limitations by embarking on a series of collaborations. As an introduction to this idea, consider this scenario: following a successful project to establish in general terms how students used the Harold B. Lee Library at Brigham Young University, we decided to undertake a further study to determine more exactly how students went about completing a research assignment. In order to do this a second collaboration was proposed between the Department of Anthropology and the Library. Under the direction of their professor and the Assessment Librarian, students from the Applied Anthropology course were the main designers and researchers for the project. The project focused on the use of ethnographic methods to complete the study. Using this background, we will show how, as the project developed, multiple collaborations were identified and accessed. These collaborations included both teaching and library faculty, online research logs for specific classes, together with the aforementioned use of students, and the cooperation between the Anthropology Department and the

Library. Additionally, we will outline the practical application and value of using the ethnographic method as an assessment tool and the advantages of coupling this with collaboration in order to obtain a well-rounded perspective. Using the Student Information Seeking Behaviors project as a case study we will critically examine the methods used and the results obtained, and also show the final outcomes and ongoing commitments resulting from this collaboration. Our focus will be particularly on the identification and inclusion of stakeholders, the use of peer review and response, the goodwill generated and the positive results obtained. Finally we will look to the future, to new projects, new ideas and new collaborations.

*Allyson Washburn holds a MLIS from Brigham Young University and is the Assessment Librarian at the Lee Library. She has evaluated various library services and spaces since 2002 and has recently collaborated with an anthropology professor on a series of studies using student researchers and ethnographic methods. Sheila Bibb has an MPhil Degree in Medical Anthropology from the University of Oxford. She teaches Anthropology at Brigham Young University and in the process of both her teaching and research has focused on ethnographic methods and the application of Anthropology. Her interests include medical, development, and applied anthropology.*

## **Research Support Services for Scholars: Understanding Evolving Research Practices**

Jennifer Rutner (Ithaka S+R)

Rapidly evolving research methods and practices across disciplines are changing the nature of scholars' interactions with academic libraries, archives, computing centers, scholarly societies, and publishers. As a result, many scholars have become less dependent on traditional research support services. Professionals from each of these sectors are now aware of the value of understanding the evolving research practices of scholars, in order to transform their services in parallel and meet emerging needs. Ithaka S+R has launched the Research Support Services for Scholars program to engage scholars and research support professionals in building a deeper understanding of current and evolving research practices, the support landscape, and the challenges both communities face. Through a series of interviews with research support professionals and scholars in the fields of history and chemistry, Ithaka S+R has constructed both a general picture of the research support landscape from the perspective of research support professionals, and a deep understanding of current research practices within the disciplines based on in-depth interviews with scholars and PhD students in these fields. Interviews with research support professionals were conducted over the phone, while the majority of interviews with scholars were conducted in person (in the scholars' work environment whenever possible). Interviews were recorded and analyzed for broad trends and themes. The samples for the scholar interviews in each discipline aimed to provide a reasonable balance of institution types, career status, and sub-disciplines; however, interviewees are not meant to be a representative sample of the field. Phase I of each disciplinary project has been completed, comprising approximately twenty interviews with research support professionals in each disciplines. Key findings from this phase of research included An overview of the vast network of research support services that are available to scholars today, orienting academic libraries within this broader context of research support services. Awareness of the centrality of collections-print, electronic, and archival-to research support provided by academic libraries. The growing practical and scholarly gap between research support professionals in libraries and the scholars they support. Emerging research support initiatives explicitly focused on graduate students rather than faculty; in anticipation of decreased barriers to the adoption of new methods and tools amongst students. Phase II for both chemistry and history, comprising interviews with forty faculty and PhD students in each field, are now underway, and will be complete by October 2012. Interviews with scholars focus on individual practices regarding evolving research methods, research and data management, library and archives use, collaboration, technology use, funding models, and publishing. This study will inform research support professionals, in academic libraries

and beyond, about the evolving practices and support needs of scholars today. The studies will identify new or expanded roles that research partners should explore in order to support efficient, high-quality, innovative scholarly research. The findings and recommendations presented at the Library Assessment Conference will target academic libraries, considering implications and new directions for services for scholars based on the needs and opportunities observed through the study of research practices.

*Jennifer Rutner is a Senior Analyst at Ithaka S+R, and lead for the Research Support Services for Scholars program. Jennifer received her MLIS from Pratt Institute, and is the current chair of the ACRL Assessment Committee. Previously, Jennifer was the Assessment and Planning Librarian at Columbia University Libraries.*

## **Communicating Value**

### **Telling the Story: Library Assessment for University Leadership**

Donna Tolson (University of Virginia)

Karin Wittenborg (University of Virginia)

Martha Sites (University of Virginia)

Anda Webb (University of Virginia)

What does the leadership of your university need to know about your library, and how will you tell them? In the past two years, the University of Virginia has welcomed a new president, provost, and executive vice president, and together they are putting a new financial model in place. The FY2013 budget process was not business as usual: a new emphasis exists on strategic alignment, best practices, and data to support our requests. In this session, we'll show how we used assessment data to communicate our strategic goals, budgetary needs, and key issues to the new University leadership during the budget process. Hear from the Deputy University Librarian about the story she wanted to tell, from the Library Strategist about gathering and packaging the supporting data we needed, and from the University's Vice Provost for Administration about what she learned about the Library as a result.

*Anda Webb is Vice Provost for Administration and Chief of Staff at the University of Virginia. As the chief financial adviser to the Executive Vice President and to the Provost since 2002, she has had experience with the University's budget process under the previous and new administrations. Martha Sites is Deputy University Librarian at the University of Virginia where she is responsible for the day-to-day operation of 12 libraries and a high-density shelving facility. Prior to her move to the Library in 1996, she was Director of User Support in UVa's central information technology organization. Donna Tolson is the Library Strategist for the University of Virginia Library. She worked for many years as a statistician and demographer before joining the University Library, where she has been a data librarian, head of the Scholars' Lab, and head of the undergraduate library.*

## Making the Case for Institutional Investment in Libraries: The Value of Evidence-Based Narratives

Steve Hiller (University of Washington)

Lizabeth Wilson (University of Washington)

The University of Washington has adopted new budget allocation methods for academic and administrative units during the past several years. An activity-based budgeting (ABB) model is used for those academic programs that generate credit hours and degrees with the majority of the program's funding derived from those sources. Administrative (or "University") units, including the Libraries, are funded primarily by the Provost without specified data or criteria. University units provide a budget narrative that lays out the context and justification for funding and new investments without a specific dollar request. During the past three years these budget narratives have increasingly asked for evidence-based information that is rich in data, including internal metrics of success and peer benchmarking. The questions we face in preparing the budget narrative are what does the Provost and other administrators need to know about the Libraries to make good investment decisions and what types of data best support our case for increased funding. This paper reviews the Libraries evidence-based narratives including setting priorities, the use of internal data and measures and Association of Research Libraries (ARL) statistics for peer benchmarking. The past three years have not been good ones for higher education in general, and at the University of Washington in particular. State funding of the University has been reduced by 50%, while undergraduate tuition has risen by 50% during this period leading to a net decrease in the University operating budget. The Libraries underwent substantial reductions, especially in the 2009-10 year with the loss of positions and substantial cuts in collections and operations budgets. The 2010-11 fiscal year was the first to use a more narrative format. Units were asked to identify key strategies and priorities and identify supportive data. The Libraries also was engaged in transforming its strategic planning process to one that relied on the Balanced Scorecard and Strategy Map. This new approach played a critical role in development of the 2011-12 narrative, especially in the identification of focused themes related to University priorities in research support and student access. The Libraries extensive assessment work, including the development of robust metrics and peer comparisons, were used effectively in the 2012-13 narrative. The Libraries evidence-based narratives have been successful in acquiring critical institutional investment at a time of budget scarcity. The use of the Balanced Scorecard and Strategy Map have made it easier for administrators to grasp the Libraries key objectives, the selective focus on key strategy is aligned with University goals, and the use of internal and external data sources for internal metrics and external benchmarking have pointedly demonstrated the erosion of library funding in comparison with our research competitors. The Libraries has realized additional funding in each of the past three years. By understanding what's critical for the university, utilizing the power of a focused narrative, and with the judicious application of meaningful statistics and indicators, other libraries can boost their chances for new institutional investment.

*Steve Hiller is Director of Planning and Assessment at the University of Washington Libraries. Steve has been active in library assessment for 20 years, leading an ongoing assessment program at the UW Libraries, presenting and publishing widely on a number of assessment-related topics, and as an assessment consultant. His current areas of interest are in user needs assessment, organizational performance metrics, and developing organizational capacity for assessment. Lizabeth (Betsy) Wilson is privileged to serve as the Dean of University Libraries at the University of Washington and to lead the most amazing library staff in the country. One of her greatest points of satisfaction is that the UW Libraries was selected the 2004 ACRL Excellence in Academic Libraries Award recipient. She is a past president of the ACRL and has been a member (and sometimes chair) of the OCLC Board of Trustees since 2000. She is excited about library collaboration in the Pacific Northwest and is having great fun as the chair-elect of the Orbis Cascade Alliance. She was selected as the recipient of the Distinguished Alumnus*

*Award from University of Illinois' Graduate School of Library and Information Science and the ACRL Librarian of the Year.*

## **The ICOLC Balanced Scorecard Pilot: The Value of Collaborative Parallel Play**

Katherine Perry (VIVA, the Virtual Library of Virginia)

James Self (University of Virginia)

There are more than 225 library consortia worldwide, but as Merryll Penson of GALILEO has said: "Consortia are like snowflakes; each one is unique". While consortia have undertaken limited assessment activities over the years, the authors are not aware of any comprehensive or coordinated assessment programs specifically designed for library consortia. At the April 2011 meeting of the International Coalition of Library Consortia (ICOLC), several consortial leaders reported on assessment efforts and began discussing the applicability of the Balanced Scorecard (BSC) to library consortia. Eight prominent U.S. library consortia (Fedlink, GALILEO, GWLA, Lyris, NCLive, NELLCO, PALNI, and VIVA) representing a wide range of libraries began working together on the ICOLC Balanced Scorecard project. Representatives of these consortia met twice with a consultant for training sessions. At the first meeting in November 2011 the group learned about strategy maps. Each representative returned home and developed a strategy map for its own consortium. In January 2012, the project members reconvened with the consultant, to share strategy maps, discuss their individual approaches, and compare results. The group learned to identify and define objectives and targets. After the group meeting, each consortium worked independently to prepare objectives in each area appropriate to its own situation. The group is meeting via conference call and in person at the April 2012 ICOLC meeting to share reports of progress, lessons learned, and next steps. The first phase of the project will be completed in the summer of 2012. The work to date has demonstrated the value of consortia working collaboratively, while still allowing each consortium to reflect its own mission, identity, and values. The ICOLC BSC project has successfully met several objectives. First, the BSC process compelled each consortium to develop a strategic plan based on its own priorities, missions, goals, and objectives. Second, the process forced the consortia to look beyond finances, and to develop strategies related to the other three BSC perspectives (customers, internal processes, and learning and growth). Third, the idea of "collaborative parallel play" has proven successful; the participants have benefited greatly from synergy and shared learning that resulted from the process. The fourth objective is yet to be realized, but the project holds the promise that metrics of general interest, perhaps a "toolkit", may be developed and shared for the benefit of others.

*Kathy Perry is the Director of VIVA (The Virtual Library of Virginia). Jim Self is the Director of Management Information Systems at the University of Virginia Library.*

## **Consortia Value: The Orbis Cascade Alliance**

Nancy Slight-Gibney (University of Oregon)

Faye A. Chadwell (Oregon State University)

Steve Hiller (University of Washington)

Donna Reed (Portland Community College)

Consortia Value: The Orbis Cascade Alliance The Orbis Cascade Alliance (Alliance) is a group of 37 libraries from universities, colleges, and community colleges in Oregon, Washington, and Idaho serving a combined 258,000 students. In October 2011 an Assessment Task Force was formed and charged to “Consider and provide recommendations concerning the implementation of a consortia approach to assessing and communicating the value, outcomes, and impact of the Alliance”. The Task Force consisted of nine members and the Alliance Executive Director as ex-officio. Faye Chadwell, chair of the task force, provided a thorough literature review in her 2011 article in Journal of Library Administration, “Assessing the Value of Academic Library Consortia” , noting: “While the literature about consortia and consortia websites provides more than adequate information describing the benefits of academic library consortia, the literature of marketing and sales argues that benefits and features alone do not represent value.” The Task Force employed a multi-methods approach, including surveys to collect information on value and impact. These included a survey sent to all member institutions in February 2012 and interviews, to determine which Alliance-supplied data was most useful now and in the future. In addition, the survey gathered information on the assessment activity, capacity, and needs at each member institution. Follow-up interviews were conducted. The Alliance Executive Director also conducted a survey of ICOLC members to determine any other work done in this area and Alliance staff provided a detailed listing of activities and potential metrics that could be provided to Alliance members. Alliance members reported making use of or potentially making use of data on consortia borrowing/resource sharing; usage of e-journals/databases and on-demand purchased e-books; cost avoidance because of group purchases; usage of discovery tools and the collaboratively constructed Northwest Digital Archives; and the ability to conduct peer comparisons among Alliance members in terms of collection size, budget, collection use, and student FTE. Responders to the survey also made note of the benefit of having a community of experts to draw upon, from the Alliance staff and from other member libraries. Survey and interview results also showed a need for Alliance value and impact to be aligned with broader institutional goals and outcomes related to faculty teaching and learning, and student achievement and success The Task Force recommendations will be presented to the Alliance Board in June 2012. The full set of recommendations and ensuing actions will be included in our paper and presentation. As libraries move strategically into multi-institutional development of collections and services, assessment must also move into that realm. This case study can provide a framework for approaching the problem, and the recommendations serve as a starting place for other groups.

*Faye A. Chadwell is the Donald and Delpha Campbell University Librarian and the University Press Director at Oregon State University. Prior to this appointment she was the Associate University Librarian for Collections and Content Management. An Oregonian since 1995, she also has held positions at the University of Oregon Libraries. Steve Hiller is Director of Planning and Assessment at the University of Washington Libraries. Steve has been active in library assessment for 20 years, leading an ongoing assessment program at the UW Libraries, presenting and publishing widely on a number of assessment-related topics, and as an assessment consultant. His current areas of interest are in user needs assessment, organizational performance metrics, and developing organizational capacity for assessment. Nancy Slight-Gibney is the Director for Library Resource Management and Assessment at the University of Oregon Libraries. She has been the leader of the UO Libraries' Assessment Team since its formation in 2005. She leads the UO efforts in conducting user surveys, developing performance metrics, and analyzing comparator data.*

## Special Collections

### Data Driven Decision Making: A Holistic Approach to Assessment in Special Collections Repositories

Melanie Griffin (University of South Florida)

Barbara Lewis (University of South Florida)

Mark I. Greenberg (University of South Florida)

Faced with shrinking budgets and reduced staffing, the University of South Florida Libraries Special & Digital Collections Department (SDC) implemented a comprehensive, integrated assessment program to better focus its diminished resources within clear strategic goals. Department faculty sought to answer the following inter-related questions: 1) When should the Reading Room open and close, and what staff skills sets are required to meet researchers' reference expectations? 2) How can Department staff reduce time per transaction while maximizing patron satisfaction? 3) How can collection development and intellectual access activities best align with strategic goals and patron needs? 4) Where should the Department target its outreach efforts? 5) What personnel skills and functions are most needed by the Department in the future?

Published literature on assessment methodologies for special collections is sparse and tends to focus on answering single, specific questions. As a result, SDC faculty needed to create a holistic assessment model. This paper presents the results of qualitative and quantitative assessment activities, which, when taken as a whole, provided SDC with a comprehensive view of patron and Department needs. From May 2010 - December 2011, staff collected quantitative data on collection use, reading room activity, and website traffic using circulation and reading room statistics, reader registration profiles, and web analytics. Staff derived statistics from several systems, including Aeon, Desk Tracker™, Google Analytics, CampusGuides, and Fedora Commons™ Repository Software. Patron surveys, conducted over academic year 2010-2011 and modeled after the National Historical Publications and Records Commission-funded Archival Metrics project, provided qualitative information on the patron experience in the reading room and usability of the Department's web tools.

The assessment strategies utilized in SDC allowed for a wide variety of improvements and changes in staffing practices, all driven by data rather than anecdotal evidence. Based on the findings, the Department made structural and navigational changes to the website; made significant updates to the digital collections user interface; rearranged collection storage to facilitate more efficient paging of materials; restructured the reading room reference model; created a prioritized processing and cataloging plan for archives and published materials based on patron use patterns; updated collection development policies; and made strategic hiring decisions. Significantly, the presence of quantitative data on patron needs and use patterns resulted in successful application for additional university funding.

The holistic assessment model created by SDC offers opportunities for refinement and replication. Presentation of SDC findings at the ARL Library Assessment Conference will further a conversation about sustainable, integrative methodologies for data-driven decision making.

*Melanie Griffin is a Special Collections Librarian in Special & Digital Collections at the University of South Florida, a position she has held since 2009. She received an MLIS with a concentration in rare books and*

*manuscripts librarianship and an MA in British literature from the University of South Carolina. Barbara Lewis is the Coordinator for Digital Collections at the University of South Florida Tampa Library. She received her B.S. in Industrial Engineering from General Motors Institute in 1981 and her M.A. in Library and Information Science from the University of South Florida in 2005. Mark I. Greenberg received his Ph.D. from University of Florida and M.A. in Library and Information Science from University of South Florida. He directs USF's Special & Digital Collections Department and serves as co-chair of the ACRL/RBMS Collection Development Discussion Group and member of the RBMS Budget and Development Committee.*

## **Understanding the User's Mental Model: An Evolving Design and Assessment Strategy for Archival Collection Description**

Rachael Hu (California Digital Library)

Brian Tingle (California Digital Library)

Purpose Formulating a design strategy for online finding aids can be a complicated and tricky proposition. The user's ability to navigate and interact with these intricate collection descriptions can oftentimes be less than successful. The design challenge for user experience and program staff lies not only in understanding what the user's needs are but how to align those needs with the complex content and features that are available to them in the online finding aid space. Building a comprehensive design strategy that will meet these challenges is a multi-pronged process that involves assessing both the components of the archival collection description as well as the user's motivation and thought processes or "mental model" while interacting with this description. The purpose of this paper is to trace the evolution of a design strategy for recent iterations of the Online Archive of California (OAC), a service developed to provide access to an aggregation of archival finding aids from institutions across California. This evolution dates from a 2008-2009 user-centered redesign effort through a program of small incremental design and assessment activities that have culminated in a newly proposed 2012 design strategy for the display of archival collection description. Approach During the 2008 redesign, a literature review and comparative analyses formed the basis for the initial discovery period. Requirements and interface design specifications were then built from individual and group interviews. Personas and delineation of user groups were created. Two rounds of usability tests were conducted prior to release of the new site in July, 2009. Since the 2009 release, regular improvements have been made on OAC, based on user and contributor feedback. In 2011, CDL staff created a pop-up survey that confirmed the OAC audience segments and personas first created in 2008. The latest round of small-scale, remote user interviews and usability tests in 2012 continue to contribute to CDL's understanding of OAC's end-user perceptions and motivations in regards to use of online archival collection guides and collection description. Findings During the 2008 redesign effort CDL worked towards providing solutions for specific user pain points for the entire site but particularly on the collection guide page. Usability testing showed that the redesign was successful in these point by point fixes. In the ensuing years, ongoing feedback has resulted in a small number of findings that have been addressed in a step by step way but has also coalesced into a more focused understanding of users' wants and needs. These incremental findings as well as a current round of user interviews and testing for the addition of a new request feature are currently being processed to formulate a proposed new design strategy for an archival collection guide page that will be shared in the conference paper. Practical Implications Assessment and design cannot be a one-time undertaking for production-level library and archival web resources. Iterative small-scale assessment through a continuum of activities serves to build a more comprehensive mental model that forms the basis for user-centered design strategy for any successful library web resource.

*Rachael Hu is the User Experience Design Manager at the California Digital Library. She has a BA in English and a MS in Information from the University of Michigan. She manages and facilitates the discovery and design process for online services and tools produced by CDL's programs and services.*

## **Assessing Special Collections: How Do We Get from Where We Are to Where We Need to Be?**

Merrilee Proffitt (OCLC Research)

For the last several years, professional discourse on the future of research libraries has emphasized the increased importance and status of special collections relative to general collections. However, both the 1998 ARL survey and the 2010 OCLC Research survey of special collections in the US and Canada document that despite the value of these collections, there still remain significant issues with backlogs in special collections, particularly in archival collections. Within general print collections, we see a quite a bit of activity, as libraries organize themselves around retrospective print alignment, primarily reflected in collaborative shared print efforts (CIC and WEST are two very visible examples in the US, UKRR in the UK). These realignment activities are mostly focused around reducing redundancy in general print collections and establishing service level agreements for provision of collections. If libraries are successful in realigning general print collections and if indeed the focus of research libraries is more oriented to collecting and exposing the rare and unique, and focusing on collections of "local" importance (those collections that particularly support the research and teaching mission of a particular institution), then institutions will need to invest in assessing existing special collections, with an eye to reducing backlogs and disclosing collections strategically. Similarly, institutions will also want to have a means of measuring the value of new collections, relative to existing holdings. The 2011 Report "Taking Stock and Making Hay: Archival Collections Assessment" defines archival collections assessment as "the systematic, purposeful gathering of information about archival collections." This activity may "include collection surveys of all kinds, including those undertaken for purposes of appraisal, setting processing and other priorities, conservation decision-making, and collection management. Collections assessment allows institutions to act strategically; gathering consistent quantitative and qualitative data about collections can inform a range of basic collection management practices, including processing and selection. Although a range of institutions (e.g. Smithsonian and UC Berkeley) and special collections consortia (e.g. the Philadelphia Area Consortia of Special Collections Libraries) have conducted assessments of their archival holdings in order to gather data to justify and plan activities, the practice of collections assessment is not widespread. With the publication of Taking Stock, the community now has pointers to several relevant methodologies that can be used as-is or serve as models to meet institutional needs. Quite apart from the use of collections assessment in order to strategically reduce backlogs in special collections and expose priority collections, planning and executing on collaborative collection assessment is desirable in the context of shared print activities and in recasting research library collections. When our institutions and organizations are forging service level agreements for provision of collections, what will the impact be on special collections? This session will focus on the areas of potential intersection between assessing special collections, and shared print initiatives, and will suggest why the two should be more connected.

*Senior Program Officer, OCLC Research. Active member of SAA, RBMS-ACRL, ACRL's Research Planning and Review Committee. Written articles, guidelines, and reports for a variety of organizations and professional journals; coauthor of Taking Stock and Making Hay. Current projects: increasing access to special collections, impact of copyright on primary source material, developing OCLC Research's "Wikipedian in Residence."*

## Methods for Measuring Return on Investment for Digitized Special Collections

Ken Wise (University of Tennessee)

Gayle Baker (University of Tennessee)

Research into methods for measuring the return on investment of digitized special collections is a component of the LibVal project sponsored by IMLS. LibVal is a collaborative effort between the University of Tennessee, the University of Illinois, and Syracuse University. The purpose of the special collection component of the project is to develop a methodology for assessing the various returns (economic, environment, efficiency, prestige, goodwill) that accrue from the financial and human resources invested in making unique special collection material available to a wider population of users through digital technology. The hypothesis preceding this project proposes that electronic access to digital material generates measurable economic benefits in terms of time and money to the population of users. We further postulate that there is a measurable value in the reduction of wear and tear on original source material through online digital access. Our approach to measuring the return on investment of digitized special collections involves the use of (1) contingent valuation methods and (2) the parsing techniques of Google Analytics. Contingent valuation is a method for determining the value of public goods where public goods are characterized by the conditions of non-excludability of and non-rivalry congestion between individuals who wish to use the goods and where it is difficult to assign a dollar value to the goods. We will apply the contingent valuation methods by using survey questions to elicit user's preferences for the digital collections by finding out their willingness to pay in dollar amounts for access to the collections. Through the analysis of Google Analytics reports we will generate demographic and usage data that hopefully will corroborate our findings from the contingent valuation survey/interviews. Data from web server logs and preliminary testing of the contingent valuation survey indicates that users value certain digital collections at the University of Tennessee Library. The quantitative amount will not be known until the survey/interviews and the findings from Google Analytics reports are completed later in the spring. We expect to determine the value to the library of electronic access versus paper access and some measure of the prestige or goodwill accruing to the university from the wider awareness engendered by the web-presence of the collections. The project will result in a template for using contingent valuation and Goggle Analytics reports for assessing the return on investment value of financial and human resources invested in digitizing a library's unique collections. The template should be useful as a paradigm for analyzing other non-monetary "public-goods" type functions within an academic library setting.

*Ken Wise is Associate Professor and Research Services Librarian at the University of Tennessee Libraries. His main area of research is the history of early exploration of the Great Smoky Mountains. Ken holds a B.D. and M.Th. from the University of Edinburgh and an M.B.A. from the University of Tennessee. Gayle Baker is Professor and Electronic Resources Coordinator at the University of Tennessee Libraries. Prior to that, she served as the Electronic Services Coordinator from 1993-2011. Her main research interest is electronic resource usage data. Gayle holds an M.S.L.S from the University of Alabama and an M.S. in Computer and Information Science from The Ohio State University.*

## Discovery

### Beyond Usability: Building Discovery Tool Requirements through User Stories

David Bietila (University of Chicago)

Libraries increasingly recognize the importance of conducting usability testing of our research tools. However, usability assessment frequently occurs only in the late phases of a tool's development. This tendency means that projects can potentially go far off track before any data is collected that might suggest a course correction is needed. User Stories is a method drawn from agile software development that offers a means of interspersing user input throughout the duration of a design project, rather than solely at the end. It allows users to shape the product from the outset and provides a better likelihood that the resulting tool will meet user needs. The current generation of library discovery tools offers a great degree of flexibility for implementation. Open source catalog interfaces, such as VuFind, Blacklight, XC, or Evergreen can be customized extensively, giving libraries the option to control the scope of collections searched, the data which is given prominence in search results, the search types and refinements which are available, and many elements of visual design. Having access to robust data on user needs can prove a valuable aid in navigating these increasingly complex configuration options. Given the amount of development resources that go into creation of our catalogs, it is imperative that we build catalogs and major tools to user-driven requirements. To guide the development of a new open source catalog, the University of Chicago Library employed the User Stories method to build a list of requirements. The user stories themselves are granular statements of patron needs, kept concise so that they can be easily organized for a manageable development process. To collect these stories, library researchers used a variety of methods, including conducting twenty patron interviews, and mining prior studies for relevant data. This project began in the summer of 2011, and data collection and analysis will be complete as of March, 2012. This process has generated a list of over 200 stories, which will be grouped and used to structure the development cycle for the new catalog, to be launched in the summer of 2013. Some of the stories recorded most frequently in the interviews were requests for streamlined access to availability information, inclusion of more open digital content, and demand for a variety of data export options (such as email, SMS, and citation management tools). The interviews also revealed some of the major philosophical differences among University of Chicago Library patrons about the role that the catalog ought to play in research endeavors here. These differences were principally over the scope of which materials should be indexed in the catalog, but significant differences also emerged regarding default search and display settings. This paper will provide an overview of the Catalog User Stories project, covering the protocol development, data collection, and analysis phases. It will describe the most significant findings that were uncovered, and explain how this data was applied to the development of the new catalog. Finally, it will detail ongoing plans for collecting user input as development on the new catalog commences.

*David Bietila seeks to provide tools that are useful to library patrons. He's worked in library technology since 2000, and is currently Web Program Director at University of Chicago Library. His work interests include interface design, information architecture, media studies, and learning about user behavior through qualitative and ethnographic research.*

### **"It's All in the Metadata." Towards a Better QA for Ebooks**

Ravit David (University of Toronto and Scholars Portal)

Dana Thomas (Ryerson University and Scholars Portal)

This paper explores the development and automation of quality assurance (QA) procedures for locally loading Ebooks on the Ontario Council of University Libraries' Scholars Portal Platform. Quality of Ebook metadata is significant for discoverability: the richer the descriptive metadata is, the more likely it will show-up in library users' searches. Richer metadata also improves discoverability within other networked digital environments beyond the library's resources. Moreover, interest in book information is no longer limited to librarians or publishers, but, in fact, when it comes to Ebooks, readers are often looking at bibliographic metadata to determine authority, credibility and appropriateness of the source to their research, and therefore must feel they can trust the information associated with the book. Nevertheless, most implementations of Ebook repositories and platforms have taken a redundant approach to metadata quality assurance processes: in many cases content is made available to readers as soon as it is put online, and the onus is upon readers to report inaccuracy, inaccessibility, or other problems. Our presentation begins by reporting the results of an examination of MARC records supplied to Scholars Portal from various commercial publishers. We will describe the identification of the most significant MARC fields for discoverability. As well, we will explore the detection of the most common metadata errors found as a result of the creation and implementation of a manual quality assurance workflow for the Scholars Portal Ebook platform. We will then discuss our methods of evaluating and analyzing various fields, including the use of statistics gathered on each collection/publisher available on our platform. Finally, our discussion will point out ways to automate imperative checks and incorporate them in the loading process in order to save valuable resources spent on manual QA.

*Ravit H. David (PhD) leads the Ebook team at Scholars Portal, Univ. of Toronto. Dana Thomas is currently a librarian in Ryerson University. Her previous role was Scholars Portal Evaluation and Assessment Librarian at Ontario Council of University Libraries.*

### **"Feels Like You've Hit the Lottery." Assessing the Implementation of a Discovery Layer Tool at Ryerson University**

Courtney Lundrigan (York University)

Kevin Manuel (Ryerson University)

May Yan (Ryerson University)

**Purpose:** The research study was initiated to evaluate and assess the discovery layer tool Summon, coinciding with its launch at Ryerson University Library and Archives in September 2011. Located on an urban campus in the heart of Toronto, Canada, the library serves a population of over 30,000. The primary purpose of the study was to investigate how well Summon served the user needs of the approximately 27,000 undergraduate students. **Design/Methodology/Approach:** The project utilized a mixed methods sequential explanatory strategy and applied an inductive analysis. Quantitative data was gathered with two online questionnaires, followed by a series of focus groups with students and one-on-one interviews with faculty and staff for the qualitative phase. Questionnaire participants were self selected from the Ryerson community, and were not required to have previous experience with Summon or to be active library users. Participants had the option to volunteer for qualitative interviews when completing the questionnaire. **Findings:** The quantitative phase of the study collected over 6,200 survey responses (21% of population), with over 420 students indicating interest in participating in a qualitative follow-up (6.7% of respondents). Next in the qualitative phase, small focus groups - separated for undergraduate and graduate students - consisted a total of 13 participants and allowed the students to explore their experiences with Summon in depth. The data showed

that most undergraduate students rated Summon highly in ease of use; however, there was a lower satisfaction with the large quantity of, and lack of relevance of search results. Despite these concerns, most preferred Summon to searching various subject-specific databases. Consequently, participants indicated that they used Summon in conjunction with other research tools, such as Google Scholar. Practical Implications/Value: The study has given insight into the role of Summon in terms of undergraduate information-seeking behaviour. Participant feedback revealed potential improvements for Summon at Ryerson and will be useful to other institutions either using or considering the use of similar products. Overall, the results from the study will help to inform Ryerson Library practice surrounding future directions in reference, instruction, and service promotion.

*Courtney Lundrigan is the Reference and Instruction Librarian at York University. She obtained BA (Hons.) and MA degrees in history from Memorial University of Newfoundland, and her MLIS from Western University. Courtney is the Treasurer/Councilor-at-Large for the Ontario College & University Library Association (OCULA). Kevin Manuel is the Data Librarian at Ryerson University. He obtained a BA in Anthropology and MA in Sociology, both from the University of Windsor, and his MLIS from Western University. He is interested in applying quantitative and qualitative research methods to library assessment and evaluation. May Yan joined Ryerson University in January 2011 to work in Electronic Resources and Serials, where she is also the Engineering Liaison Librarian. May holds a MIST and a BAsC., both from University of Toronto.*

### **Did We Get What We Paid For? An Institutional Assessment of User Behavior, User Expectations, and System Performance of Web Scale Discovery Tools**

Doralyn Rossmann (Montana State University)

Brian Rossmann (Montana State University)

**Purpose and Methodology:** The purpose of this study is to assess an implemented Web Scale Discovery (WSD) tool with regard to user behavior, user expectations, and system performance. An academic library which implemented a WSD in July 2010 serves as the source of data for this study. The assessment consists of four points of analysis. First, a quantitative design is used to assess link success from search results using a set of researcher-generated search queries. These results are categorized into full text and non-full text links and are reviewed for their success in reaching the targeted item, including how many “clicks” it took to reach the item. The second portion of the study uses WSD tool transaction log analysis over a two-year period and addresses the hypotheses that search query quality is low and that quality of searches improved over the two-year period. The third section of the study evaluates the coverage of resources in the Web Scale Discovery tool in comparison to library holdings and evaluates alternative coverage in other WSD products or alternate library holding possibilities. Finally, the study uses a qualitative analysis to evaluate initial search relevance. Through a user comparison survey, library patrons compare results of five pre-determined searches in the WSD tool and a general, academic aggregator database. These users then provide their determination of quality and relevance. **Timeframe for Findings:** The working group which is gathering and analyzing this information has various time goals depending on the point of analysis. The link success module will be completed by May 2012. The transaction log analysis covers July 2010-June 2012. Analysis for July 2010- June 2011 is complete and the second set of analysis for July 2011-June 2012 will use the same methodology and will be complete in mid-August 2012; these two years of data will be compared against each other for possible changes in findings. The coverage of resources piece will be complete in August 2012. The search relevance research will be concluded in mid-August 2012. A compilation of all four points of data will be assembled and complete by September 1, 2012. **Value of this Research:** This research design and subsequent findings provide other libraries with tools and benchmarks for conducting similar studies of WSD tools pre- and post-implementation. Also, in

addition to assessing these tools, the findings will have implications for: (1) Better understanding user behavior, (2) Determining user expectations and perceptions, and (3) Gauging system performance. This information will inform how libraries can work with vendors and users to bridge gaps between these three areas. With the relative newness of WSD in comparison to other library technologies, it is helpful to have models and designs for libraries wanting to assess these areas.

*Doralyn Rossmann is Assistant Professor, Collection Development Librarian and Team Leader at Montana State University. She holds a BA in Political Science and English and MSLS and MPA degrees. Her current research focuses on public budgeting, return on investment, and Web scale discovery tools. Brian Rossmann is the Associate Dean of the Library and a member of the faculty at Montana State University. In addition to an MLIS he holds an MA in Classics. Before becoming an administrator he was involved in reference, library instruction, and government documents.*

## Teaching and Learning III

### **Charting Success: Using Practical Measures to Assess Student Learning in a Peer2Peer Research Model**

Annie Donahue (University of New Hampshire at Manchester)

Charting success: Using practical measures to assess student learning in a Peer2Peer research model. Purpose: This paper will report both qualitative and quantitative findings from an eighteen-month study measuring the effectiveness of delivering information literacy instruction through a collaborative partnership between the UNH Manchester (UNHM) Library and the Center for Academic Excellence (CAE). By incorporating peer writing tutors trained in basic library research skills, first-year college students gain valuable assistance as they navigate the research and writing components of their introductory composition courses. Peer research mentors work with students one-on-one on research/writing projects, while librarians work with the same students, utilizing active learning techniques and exercises to teach advanced research and evaluation strategies. Methodology: The data collected includes both quantitative measures and qualitative responses. Pre/post tests were administered in the second week of the semester and again in the week before finals to measure students' levels of improvement in information literacy and critical thinking skills. Simultaneously, an affective likert scale was utilized to measure students' attitudes and perceptions of change in library anxiety and confidence levels with the library research process. Students' reflective response papers and tutor session reports were examined to measure changes in research and critical thinking skills. Findings: Initial quantitative findings of the study, begun in spring 2011, indicated an increase in student learning in three distinct yet interconnected areas: using library resources correctly, building an effective search strategy, and evaluating search results with respect to the information need. Each of these skills match to one of the standards outlined in the Association of College and Research Libraries (ACRL) Information Literacy Competency Standards for Higher Education. Subsequent semester results have returned similar findings. Further analysis of the data collected will be conducted during summer 2012 to yield a richer outcome as qualitative measures complement quantitative measures thereby enabling a holistic evaluation of the effectiveness of the peer research mentor model which replaces the traditional one-shot library instruction methodology with a semester-long engagement of information literacy skill-building. Practical Implications: This eighteen-month study is the initial step in evaluating the Peer Research Mentor Program at UNH Manchester. The next steps in the continuing evaluation include delving deeper with new assessment measures to evaluate student ability to apply and synthesize the information found to responsibly and ethically meet their individual research needs; and to assess the impact of this peer-to-peer approach on the

information literacy skill development of the peer research mentors. Rubrics and citation analysis are two tools anticipated to provide the measures necessary to gain evidence of effective learning at this next level. Focus groups and interviews will allow past and present peer research mentors to tell their own stories by relating the challenges, successes, and growth achieved through this experience.

*Annie Donahue is the Library Director at the UNH Manchester Library. Her research interests include information literacy collaborations between library, teaching faculty, and academic support centres as well as assessment of information literacy and student learning outcomes. She has presented her research at the state, regional, national, and international level.*

### **The A-Team: Making a Plan Come Together Across Campus**

Rhonda Huisman (Indiana University-Purdue University Indianapolis)

The need for a deeper understanding of information literacy skills, standards, organization, and programmatic structure of instruction at the campus level has been on the minds and hearts of academic librarians for more than two decades. However, without a wide-reaching, flexible approach to assessment of instruction, librarians can be caught in a reactive rather than pro-active situation when there is a need for data and evidence on what kind of impact the library and librarians demonstrate, particularly when preparing for accreditation. Librarians may have limited incentives or support to gather these types of data or documentation, and even less support showing faculty collaboration. A thorough environmental scan of the library instruction setting gathered this necessary documentation, and minimized the randomness of evidence used in decision-making, as well as alerted leaders to developments and issues that may affect the organization as a whole. By engaging with units across campus, the library is recognized as an integral part of the university system, adapting to the needs of the learner and supporting the faculty in their endeavors. As a result of meetings with campus assessment groups and discussions with administrators, a project was funded to implement the “Analyzing Your Instruction Environment: A workbook” (ACRL, 2010). Focus groups and an advisory board consisted of faculty, librarians, administrators, and students for one year, to assess all elements of instruction including learner characteristics, instruction statistics, library resources, and physical spaces for teaching and learning. The purpose of this project was two-fold: 1. To engage both library faculty and staff in the responsibility, development, and accountability for the Information Literacy Program and instructional/outreach activities. 2. To involve other campus entities in the understanding of the library mission and instructional goals, including the relevant student learning outcomes, and exposure to the professional information literacy standards at the national level (ACRL). Documentation from the project has been added to a centralized online platform based on the NILOA transparency framework. Viewpoints and feedback from the librarian heading the project (presenter), a faculty member from one of the focus groups, and a campus administrator who heads the programmatic review and assessment committee will be shared. The results of the project may include marketing, programming, and services that will be shaped around demonstration, data, and discussion, rather than around speculative and anecdotal information. The final report will point to deficiencies as well as competencies, and put structures in place that support and mobilize the information literacy program, in addition to suggestions for improvement strategies for instruction, assessment, professional development, or administrative support (To be completed in Dec, 2012). Goals for this session include: How to start conversations with campus administrators, what accreditation teams are looking for as evidence of student learning/engagement with library services, and what information literacy means to faculty and administrators across campuses. The presenter will share with the audience issues of data collection, transparency in documentation, and better practices for collaborating and communicating with faculty.

*Rhonda Huisman, MAE, MLIST is an Assistant Librarian for Education and the Center for Teaching and Learning at Indiana University-Purdue University Indianapolis. Her teaching, presenting and publishing experiences include topics such as information literacy, assessment, first-year seminars, transition to college, and faculty-librarian relationships.*

### **Conversations with Students: Assessment Leads to Adjustment**

Julie Petr (University of Kansas)

Amalia Monroe-Gulick (University of Kansas)

Purpose: Assessment must be built into every step in the development and implementation of library programming for students, allowing practitioners to make timely evidence-based adjustments. This presentation describes the application and assessment of librarian-led discussion groups for graduate students in the fall of 2012. Design/Methodology/Approach: In 2010, the presenters conducted a pilot, qualitative research project to assess the information literacy skills of incoming graduate students in the social sciences. Information was gathered from the students themselves, rather than assuming an understanding of their needs, to inform the development of library instruction and services. The data collected from the 2010 study was used to develop and implement librarian-led discussion groups with a new cohort of Sociology graduate students in the fall semester of 2011. The presenters met with the students on a monthly basis, focusing on different topics related to the research process as a whole. These topics, which were chosen because of the results of the previous research, included: research processes, research life cycle, KU Libraries' resources, and graduate school expectations and anxiety. Finally, a follow-up meeting was held with the students in February 2012 to assess the effectiveness of the librarian-led discussion groups in order to collect additional data and continually improve services to this user population. The audio of each session was recorded and professionally transcribed to assess the effectiveness of each session individually and the program as a whole. Findings: The discussion groups were successful in several ways, including piloting a new instruction format for graduate students, establishing stronger student/librarian relationships, and supporting the development of a more cohesive student cohort. The process also increased librarian and teaching faculty interaction. Even with these positive results, the findings also demonstrate that further adjustment and development of innovative services to graduate students is necessary. Through the evaluation process, the librarians identified improvements to the current program. Practical Implications/Value: The results of this program have implications for the future delivery of library services to graduate students. A more holistic approach to library programming would better address the needs expressed by the students. The "one-shot" library instruction should be replaced with "conversation-style" library instruction, but not on a monthly basis. In fact, the students stated that they would find second semester library instruction more useful. The findings also support the development of innovative services not usually associated with academic libraries, such as hosting colloquies with students from other disciplines. Assessing programming, during and after the process, is essential. Qualitative assessment techniques can be as valuable as quantitative assessment for identifying what students need and want related to library assistance. Talking with students is an invaluable and sustainable form of assessment, creating opportunities for ongoing interactions with students.

*Julie Petr is a Social Sciences Librarian at the University of Kansas, with liaison responsibilities to the School of Journalism and Mass Communication and the Department of Communication Studies. Ms. Petr earned a B.A. and M.S.W. from the University of Kansas and an M.L.S. from Emporia State University. Amalia Monroe-Gulick is a Social Sciences Librarian at the University of Kansas, with liaison responsibilities to the School of*

*Public Affairs and Public Administration, and the Department of Political Science. Ms. Monroe-Gulick earned a B.S. and M.S. in political science from Illinois State University and an M.L.S. from Indiana University.*

## **Assessment in the Organization**

### **Assessing Assessment: A Framework to Evaluate Assessment Practices and Progress for Library Collections and Services**

Nisa Bakkalbasi (Columbia University)

Donna Sundre (James Madison University)

Keston Fulcher (James Madison University)

**Purpose** The purpose of this framework is to provide a toolkit to evaluate the quality and methodological rigor of Library Services and Collections assessment plans and reports. Recently, library performance measurement and assessment have seen expanding interest to provide evidence and context for library priority setting and decision-making. In order to evaluate the quality and effectiveness of services and collections, the number of library assessment activities has grown exponentially. Previously, the occasional assessment task was assigned to a library staff member who had interest or a specific area of expertise. However, the demand for assessment and evaluation expertise has led to full-time positions, and sometimes evaluation units, charged with sole responsibility for library assessment and planning. Although this growing area of library management has become recognized as a legitimate use of limited resources, there is not yet a framework to evaluate the quality and rigor of the assessment plans implemented. A fundamental challenge is that responsibility and authority for assessment activities are distributed across units, while coordination of these tasks rests with a single full-time librarian or committee. Libraries use a wide variety of methods in their assessment endeavors ranging from surveys to usability studies. Further, the areas being assessed are as varied as the methods used. In such a decentralized environment with diverse projects and methodologies, staff members who shepherd assessment activities may not have the attendant skills and competencies to effectively employ basic statistics, diverse methodologies, survey construction, data analysis and interpretation, and report presentation. To support, advance, and sustain these efforts an effective structure must be put in place to assess assessment processes to ensure that libraries gather appropriate, valid, and accurate evidence to support data-driven decisions and accountability frameworks. **Approach** This toolkit provides a standardized, step-by-step mechanism to create and evaluate assessment plans and reports generated by units across the organization. The toolkit includes: (1) Elements of an Assessment Cycle, (2) an Assessment Progress Template to provide annual assessment-related information, and (3) an Assessment Progress Evaluation Rubric to be used by central entities (e.g. Assessment Coordinators or Committees) to review assessment activities. These assessment plans and reports are expected to include four key elements: (1) well-formulated assessment objectives; (2) appropriate methods and data collection process; (3) meaningful analysis, interpretation, and validity evidence; and (4) dissemination and use of results for improvement of services, collections, and the assessment process. **Findings** A review of the framework using JMU and session participants' libraries will be conducted. Our rubric provides a criterion referenced framework, such that performance evaluation is benchmarked to best practice. Norms are unnecessary-the best benchmark is the same program or unit over time-emphasis is on improvement, not comparisons with others. **Value** To claim success, a plan and report should be benchmarked, evaluated in a substantive and systematic way, and improved continuously. The toolkit will also be useful in assuring that reports use the same format and include all necessary components;

this framework provides libraries with a toolkit to effectively report progress and promote sustained positive effort. Footnote: This framework is modeled after James Madison University's academic programs' assessment review process, see: Center for Assessment and Research Studies. Assessment Progress Template. The Center for Assessment and Research Studies. Retrieved March 4, 2012, from <http://www.jmu.edu/assessment/JMUAssess/apt.html>

*Nisa Bakkalbasi is the Assessment Coordinator at Columbia University Libraries. She previously served in a series of positions at James Madison University and Yale University Libraries. She holds a M.S. in Library and Information Science from Long Island University, a M.S. in Applied Statistics and a B.A. in Mathematics, from University of Alabama. Donna L. Sundre is the Executive Director for the Center for Assessment and Research Studies (<http://www.jmu.edu/assessment>) and Professor of Graduate Psychology at James Madison University in Harrisonburg, Virginia. Her research and publication areas include assessment practice, higher education policy, examinee motivation, instrument development, and validity issues. Keston Fulcher the Associate Director for the Center for Assessment and Research Studies and Assistant Professor of Graduate Psychology at James Madison University in Harrisonburg, Virginia. His research and publication areas include meta-assessment, validity in higher education assessment, and measuring cognitive and developmental changes in college students.*

### **The Assessment Needs of a Data-Driven Organization**

Lisa Horowitz (Massachusetts Institute of Technology)

Christine Quirion (Massachusetts Institute of Technology)

Jennie Murack (Massachusetts Institute of Technology)

Assessment, in the parlance of “data-driven decision-making,” is now part of the MIT Libraries’ “Desired Future State.” After a staff reorganization in July 2010, where the MIT Libraries moved from a structure based on a geographic footprint to one based on function, library leaders placed a new focus on system-wide assessment. As libraries nationwide shift from counting transactions to measuring impact and value, the MIT Libraries have taken a ground-up approach to assessment across the library system through the establishment of a Library Assessment and Business Intelligence function, as well as a User Experience group with responsibility for user needs and usability studies. The position of 0.5FTE Assessment Librarian was created, and a supporting Assessment Team was identified. While the results of our assessment activities are important in determining our future direction, so too are the lessons learned from analyzing the structure and activities of our assessment plan from a broader perspective. This paper describes our new assessment model and evaluates it against our internal assessment goals, highlighting its strengths and weaknesses. This paper will describe and evaluate the system-wide assessment activities conducted in the MIT Libraries new organization from July 2010 through February 2012: a pilot assessment plan, a series of user needs studies, and the results of a triennial user survey. We will also describe some targeted assessment activities, each of which had a specific purpose. A new “Monthly Metrics” series of infographics was launched, to expose library leadership to different ways that data could be presented to tell a story. A preliminary assessment dashboard was tested to initiate conversations about which metrics tell the MIT Libraries’ story. The Balanced Scorecard tool was used in the pilot assessment plan to reveal imbalances or areas needing more targeted support to realize strategic priorities. The standing Assessment Team will be analyzed for its contributions to the assessment work. This paper also will discuss and evaluate our innovative approach to carrying out the activities listed above, including how library leaders were informed, involved and embedded into assessments; how metrics were chosen and how well they worked; the holistic approach to the triennial library user survey which

empowered department and unit heads to approach analysis from the perspective of the services they provide; and how we used qualitative user behavior data to inform the library survey. The effectiveness of each assessment activity and method will be discussed along with lessons learned. Future directions for the MIT Libraries resulting from an evaluation of our assessment plan will be explored. The audience for this paper is anyone who is new to assessment or facing organizational transition, anyone who is looking for ways to be more data-driven, and anyone with budget issues who needs to demonstrate impact. The assessment activities have been completed and a review of these activities will be completed by August 2012.

*Lisa Horowitz is MIT Libraries' Assessment Librarian. She develops, coordinates and oversees assessment efforts across the Libraries, and acts as assessment specialist within the User Experience group. She has extensive experience in assessment of reference and information services, and has presented and written several articles about library assessment. Jennie Murack is Geospatial Data Librarian and Statistics Specialist at MIT. She leads assessment of GIS services, is a member of the MIT Libraries Assessment Team, and worked on the 2011 MIT Libraries survey. She has five years of previous experience with the evaluation of educational programs, materials, and services. Christine Quirion is the Head of Information Delivery & Library Access in the MIT Libraries, and is a member of the MIT Libraries Assessment Team. Christine provides assessment advice to peers, contributes to the analysis of the 2011 library survey and helped design 2011's ethnographic study of library spaces.*

## **Collaborative Measures Building Using the Balanced Scorecard in North American Libraries**

Elizabeth Mengel (Johns Hopkins University)

Vivian Lewis (McMaster University)

The Balanced Scorecard is a widely-accepted organizational performance model that ties strategy to performance in four critical areas: finance, learning and growth, customers, and internal processes. While originally designed for the for-profit sector, the Scorecard has been adopted by non-profit and government organizations, including some libraries. This paper focuses on the continued research by the authors to understand and facilitate common measures across libraries using the Balanced Scorecard as a strategic planning tool. One of the most difficult tasks for libraries using the Balanced Scorecard is the development of measures that are relatively easy to collect, give data that are comparable, and tell a story of the value the library provides the institution. Given that the work academic research libraries do is relatively similar from institution to institution, the authors hope to determine if those libraries using the scorecard develop similar measures and if access to a common body of metrics facilitates the selection process. First, the authors explored the similarities in measures between the original cohort of the ARL Scorecard project. The authors then created two options for furthering the concept of collaborative scorecard development: a) the creation of a set of standardized core measures for use by scorecard sites; and b) the creation of an inventory of measures from which prospective scorecard sites could choose based on local circumstances. The authors have used a combination of quantitative and qualitative approaches. The quantitative aspects of the study will be informal and theme-based. The qualitative aspects will be explored as the authors conduct focus groups with the cohort two institutions. The authors have analyzed the degree of overlap between the measures from the first cohort group and have conducted focus groups with the second cohort to explore the two tools. Data from the focus groups will be analyzed in April/May 2012 and conclusions and recommendations will be drawn from that analysis. Finally, the paper will continue to explore the nature of collaboration as an assessment strategy for large academic libraries. Were the participants influenced by the selection of metrics and or the specific formulas used at other locations? Using 2-3 metric themes as examples, would it be feasible for the sites to adopt common

formulas (to facilitate benchmarking)? Alternatively, should the partners consider the creation of a public inventory of scorecard metrics that prospective sites could choose from based on their own local environments? The research is based on the experiences of four ARL libraries that implemented the balanced scorecard over the past 4 years. The concept of standardized metrics is viable for some themes. An omnibus inventory of ARL scorecard metrics would be easy to compile and would prove useful to prospective scorecard sites. The proposal explores the interesting concepts of collaborative versus collective assessment. Can libraries improve their arsenal of assessment tools by working alongside each other (as opposed to directly with each other) as they implement local organizational performance measurement instruments?

*Mengel, Elizabeth, Associate Director Scholarly Resources and Special Collections, The Sheridan Libraries, Johns Hopkins University, emengel@jhu.edu. 3400 N. Charles Street, Baltimore, MD 21209 USA 410-516-0809. . She is responsible for developing and implementing the strategic direction of a large multi-library collection.*  
*Lewis, Vivian, Associate University Librarian, Organizational Development Mills Memorial Library, McMaster University, lewisvm@mcmaster.ca, 1280 Main Street West, Hamilton, Ontario L8S 4L6 Canada 905-525-9140, x23883. In this capacity, she is responsible for strategic planning and initiative management, assessment, human resources, budget, marketing and development.*

## **Collections / E-Resources I**

### **Multi-Institution Circulation Patterns in a Cooperative Interlibrary Loan Program**

Kathleen Bauer (Yale University)

**Purpose:** This talk will report results of a study analyzing movement of materials among a group of twelve libraries in northeastern United States within a cooperative interlibrary loan service called Borrow Direct, and Yale University. The purpose was to identify borrowing/lending patterns to better understand if some areas of the Yale collection are heavily supplemented with material from other collections, or if borrowing is evenly spread across subject areas. **Methodology:** Borrowing and lending data between Yale University and all other Borrow Direct institutions were gathered for fiscal year 2011 and were combined with data on internal circulation of books at Yale University, along with institutional data about departments and their relative sizes. The collection analysis used normalized call numbers mapped to the Library of Congress classification scheme to identify categories of materials and how often they moved between partner institutions. Borrowing/lending patterns were examined to discover affinity groups for particular subject areas. **Findings:** Findings at this time are preliminary. Call number areas were categorized as high internal use-high external use, high internal-low external, low internal-high external, and low internal-low external. Subject areas have been identified where Yale borrows more than would be expected given the size of the department faculty and enrolled students. Additionally a relatively small number of high use and repeatedly borrowed/loaned materials have been identified. **Practical Implications/Value:** Academic libraries are experiencing high use of interlibrary lending programs. This points to the need to understand the library collection and its use as existing both inside and outside the home institution. Library staff need to measure which materials they purchase are used internally, but they also need to measure use patterns which occur between partner institutions. This research points to methods other libraries may find helpful in measuring overall collection use by subject areas, including internal circulations and multi-institutional circulation patterns.

*Kathleen Bauer is the Director of Usability and Assessment at Yale University Library, a department she created. She is currently a doctoral student at Simmons College, has an MS in Mathematics from Rensselaer Polytechnic*

Institute and a BA from Mount Holyoke College. For more information about Usability and Assessment at Yale see <http://www.library.yale.edu/usability>.

## **Mining eResource Data to Reveal Hidden Assets - How One School Dug Deeper into MINES to Illustrate the Value of eResources**

Catherine Davidson (York University)

Aaron Lupton (York University)

**Purpose:** In 2009-10, the Ontario Council of University Libraries ran a second iteration of the MINES for Libraries Survey (the first time was in 2004/05.) MINES for Libraries (Measuring the Impact of Networked Electronic Services) is a 5 question, point-of-use, web-based survey that captures user demographics and purpose of use of eresources. Consortia findings from both instances of the survey have been reported at the aggregate level elsewhere. This paper will describe how York University continued to mine its institutional pool of responses at a more granular level in order to deepen the assessment of the value of local and consortially-acquired eresources. **Findings:** This paper will situate York University in its consortia context - both institutional - OCUL (Ontario Council of University Libraries) and with respect to Scholars Portal, OCUL's shared technology infrastructure. A brief synopsis of methodology and consortia level findings (reported on extensively elsewhere) will be followed by a description of York-specific analysis carried a year after the MINES survey completed in February 2011. In order to achieve a value measure of eresources at York University, the following dimensions will be examined: How use of consortia products compares to that of individually-licensed content. How "purpose of use" intersects with specific ejournals by publisher packages, to show which eresources are being used for research and teaching. How "purpose of use" intersects with consortia vs. local ejournal packages, to show proportionately how differently licensed eresources are used in research and teaching. What questions about the use of eresources remain unanswered? What is MINES not measuring that should be incorporated into the next iteration? **Practical Implications/Value:** By sharing our methodology and findings in sifting through MINES data, this paper will demonstrate that there is value in continuing to analyze MINES data at the local level and how the MINES survey can be used as a tool to measure value of eresource expenditures and consortia initiatives.

*Catherine Davidson is AUL, Collections at York University. In 2009-10, she served as Visiting Librarian at Scholars Portal, where she worked on the MINES for Libraries survey for OCUL. She has presented on MINES at the 2010 Library Assessment Conference and the 9th Northumbria International Conference on Performance Measurement in Libraries and Information Services. Aaron Lupton is the Electronic Resources Librarian at York University, where he is responsible for acquisition, assessment, and negotiation of all eResources. He was responsible for coordinating the LibQUAL+® and MINES surveys in 2010 as well as performing the analysis of their results. He is the current Chair of the Assessment Committee at York.*

## **MINES for e-Books**

Brinley Franklin (University of Connecticut)

Terry Plum (Simmons College)

Patrons' use of book materials is shifting from charging out print books to downloading or viewing ebooks, dramatically and permanently changing library services. The trends from print to digital

delivery of journals in ARL libraries have been well documented. However, there have been only a few investigations of book usage that go beyond collecting circulation and COUNTER data during this important transitional time. This paper focuses on electronic book (e-book) usage at seven Association of Research Libraries (ARL) member libraries between July, 2008 and June, 2011. It is the first tabulation of e-book usage at ARL libraries collected using MINES for Libraries. The paper's purpose is to profile e-book users at ARL libraries during the early years of e-book usage by ARL library users. The authors, co-developers of MINES for Libraries, have conducted electronic resources usage studies at more than twenty-five academic libraries during the three year period from July, 2008 until June, 2011, a period of rapid growth in e-book usage. The MINES for Libraries methodology has been previously documented, employed at more than forty academic research libraries, and has proven to be an effective reflection of overall e-resource usage at a surveyed library using random sampling techniques. This paper reports on e-book usage at ARL libraries that sampled e-resource users during randomly selected times each month for a year. Each surveyed user, upon selecting an e-resource offered by the library, was presented with a brief four question survey before they were connected with the e-resource selected. Utilizing the MINES for Libraries web survey intercept methodology, the authors captured various demographic and purpose of use profiles at the seven ARL libraries included in this paper. More specifically, the demographic information collected from e-book users included classification (e.g., undergraduate student, graduate student, faculty/staff); affiliation (e.g., arts and sciences, engineering, medicine, fine arts), and location (in the library, on-campus but not in the library, and off-campus). Purpose of use included: instruction/education/non-funded research; funded research; patient care, and all other activities. The findings reveal the early adopters of e-books in their work, by classification and affiliation as well as the purpose of use as it relates to work done by ARL library users, both in the library and remotely. The web intercept survey data will be compared to data on print book usage from print surveys given in person to users as they enter the physical library. The print surveys are distributed at the same time as the web surveys, and track the same demographic and purpose of use values. The different response rates of the web and print surveys will be taken into account. The implications of the differences between the usage of print books and ebooks will be discussed. The practical implications of this paper's findings relate to increased knowledge and awareness of the demographics of e-book users at ARL member libraries. A particular value of the paper is that it will serve as an early benchmark for future e-book use studies, and will document who is using book materials and why, during a period when book usage and the book materials themselves are changing.

*Brinley is Vice Provost, University of Connecticut Libraries. Brinley served as Chair of the ARL Statistics and Measurement Committee and has served on the National Center for Education Statistics Academic Library Survey Advisory Committee and on the IFLA Statistics & Evaluation Section. He has been President of ARL, the Boston Library Consortium, and Neline. Terry is Assistant Dean, Simmons Graduate School of Library and Information Science, where he manages technology, directs the satellite site campus, GSLIS West, and teaches information technology, digital libraries and evaluation. He publishes and presents regularly and is an international training consultant for digital libraries and assessment.*

## Mixed Methods

### Quest for Continuous Improvement: Applying Feedback and Data Gathered through Multiple Methods to Evaluate and Improve Use of a Library's Discovery Tool

Jeanne Brown (University of Nevada, Las Vegas)

#### Purpose

The UNLV Libraries implemented the discovery tool Summon in fall 2011 to improve user self-sufficiency and provide a seamless tool to find all library resources. At the time of implementation, the Continuous Summon Improvement (CSI) group was formed – composed of the Head of Collections, the Electronic Resources Librarian, the Integrated Library Systems librarian, and chaired by the Head of Libraries Assessment – to ensure continuous and appropriate improvement to Summon, in part by collecting relevant data and feedback through multiple means.

#### Methods

To address its charge, the CSI group has collected – and continues to collect – many streams of input including:

- Two types of usability testing, one to test navigation and the interface, the second using a scenario approach to assess research functionality
- Heuristics testing, applying best practice and standards to the tool
- Perception and satisfaction surveys, for users and staff
- Usage data – both search tool use and use of library journals and databases
- Availability testing through simulated searches – using top user keyword searches
- Problem reports submitted by users and staff
- Staff feedback and suggestions

#### Findings

Although users gave Summon high ratings for ease of use and indicated they are “likely” or “very likely” to use the tool to find resources, the evidence pointed to a range of problems, from specific access failures to unsuccessful tool-feature functionality. Librarian and user feedback showed some overlap in concerns, such as the intimidating nature of sifting through long lists of results. Data on number of clickthroughs (accesses to pages allowing the download of full text) confirmed a substantial increase in access to library resources. Examination of data on use of individual full text databases and journal packages showed a mixed pattern of increase and decrease. Usability testing provided ample evidence that even a short demonstration of search features could increase search effectiveness and user satisfaction with Summon.

## Value

The library was able to take specific action to alleviate some of the problems with the discovery tool. Full text access to specific articles was either fixed or reported. Some features were disabled until they could demonstrate acceptable functionality (e.g. database recommender feature). Initial staff feedback indicated that many librarians felt that since the tool was supposed to be intuitive it should not need to be covered in instruction sessions – a perception we countered with usability findings, noting, for example, the difficulty users experienced in finding the save option (which in turn led to the citation formatting capability) which was quite popular once located. The need for at least a basic demonstration of Summon features was also indicated by the infrequent use and overall lack of user awareness of options for filtering results. Use data provided initial indicators of the tool's impact, and allows us to benchmark that impact for ongoing examination.

In addition to insight into Summon – its use and areas needing improvement – the multifaceted project sheds light on the relative value of the various methods for collecting feedback and data. It also points to the value of complimentary and cumulative data.

*Jeanne Brown is Head of Assessment for the Libraries at the University of Nevada Las Vegas. She has been involved with assessment in various capacities since 1996, and in her current position since October 2010. She chairs the Continuous Summon Improvement Group and the library's usability committee.*

## **Herding Cats, Knitting Fog, and Nailing Pudding to The Wall: Toward a Mixed-Methods Approach for Evaluating Social Media Marketing in Libraries**

Selene Colburn (University of Vermont)

Just a few years ago, social media tools were so new that adapters were considered innovators. Many academic libraries now routinely share information about our collections, programs, and services through these modalities, but how do we evaluate our efforts, in a medium that remains inherently experimental? This paper will look at both qualitative and quantitative evaluative measures that can be used together to assess the efficacy of social media marketing campaigns and will provide conference-goers with sample rubrics for assessing the use of Facebook, Twitter, and YouTube. Detailed literature searches in the library and business fields will inform both an understanding of existing practices of social media assessment and potential future directions for libraries. An overview of analytics available through Facebook, Twitter, YouTube and associated tools will be presented, with an eye toward understanding: a) what questions can be realistically answered by this data; b) what questions cannot be answered by these metrics and may require more qualitative and/or independent methods; and c) the challenges of using data provided by proprietary applications marked by frequent and substantive changes to interface and functionality. Additional methods such as surveys, focus groups, and web analytics will be discussed. Finally, the use of rubrics as an overall organizing device will be examined and proposed. An extensive review of library literature performed in late 2011 indicates that formal assessment of social media use is rarely taken up as a topic; discussion instead focuses on either the question of whether to use social media tools at all or comparative evaluation of which tools to deploy in various scenarios. A handful of recent articles suggest the emergence of more robust metrics, and the author of the proposed paper will be carefully monitoring the library literature throughout 2012 for additions to this trend. Business literature advocates more aggressively for tactics such as use of analytics, text mining, and the adaption of a Return on Investment (ROI) model. Existing standards, such as the Internet Advertising Bureau Social Media Council's "Framework for Measuring Social Media Activity" provide useful ways of thinking about

relative assessment measures for social media platforms and begin to suggest the usefulness of rubrics in this work. Facebook, Twitter, and YouTube all have built-in tools that allow users to track statistics, including: numbers and demographics of users/fans/followers; view counts; sources and numbers of external referrals; degrees of interactivity; and even the media consumption habits of followers. These tools can be used to answer questions about audience, user interaction, reach, and the success of library messaging. Additional assessment methods can be deployed to further understand the impact of social media on user behaviors. With clear goals and objectives about what libraries hope to accomplish with social media, it is possible to assess these efforts using a variety of tools. Drawing in part on the author's previous research on online video outreach and viral marketing campaigns, conference-goers will be supplied with an overview of potential methodologies for evaluation, as well as practical sample rubrics for model projects. [Please note: Literature searching, review of social media analytic tools, and research on rubrics are complete; in the summer of 2012 the author will be creating model rubrics for sample social media marketing projects and testing them with data/projects at the University of Vermont]

*Selene Colburn is an Assistant Library Professor at the University of Vermont, where she serves as Assistant to the Dean of Libraries for External Relations. She has also worked in the archives of the WGBH Educational Foundation, the Shelburne Museum, the St. Johnsbury Archives Collaborative, and the University of Vermont.*

## **Defining User Experience in Libraries**

Joe Gilbert (University of Virginia)

Erin Mayhood (University of Virginia)

Library User Experience, SPEC Kit 322, published by ARL in 2011 (1), provides one of the first published overviews of the ways research libraries are employing "user experience" (UX) in their organization. As authors Robert Fox and Ameet Doshi note, their survey results show that no strong, consistent definition of user experience within a library context has yet emerged for ARL libraries. As libraries experiment with UX -exploring what it is and where it fits in their organizational structures -trends in definition and implementation begin to emerge, with an emphasis on assessment being the most common. Though assessment plays a vital role in any UX process, libraries' continued progress in the field requires us to recognize that we are often only implementing half of the discipline. This paper encourages libraries to consider all emergent UX efforts through the dual lenses of assessment and design. Although UX is new to libraries, it has been a recognized discipline associated with interface design since the mid-1990's (2). Given UX's massive growth in the intervening years, libraries have a tremendous opportunity to learn and build upon UX successes in other industries. Moreover, while assessment activities are important to UX methods across industries, the discipline also emphasizes design, iterative implementation, and strategic direction as equally important elements. An inclusive definition of this conception of UX that is also directly applicable to libraries might read: User Experience employs user research and user-centered design methods to holistically craft the structure, context, modes of interaction, and aesthetic and emotional aspects of an experience in order to facilitate satisfaction and ease of use. In order to implement a UX program along these more broadly conceived lines, we must modify our organizational structures to align more closely assessment staff with trained designers, making interface design an integral part of the UX process. To this end, the University of Virginia's UX Team pairs an assessment-focused librarian with a UX designer in order to facilitate a user-centered approach from assessment to implementation. This paper explores the user experience process employed by the U.Va. Library in action during a now-complete website redesign, including the use of personae, user survey and focus group data, usability test results, and web analytics data to create design principles, build an information architecture, confirm design

decisions, and prioritize continued work. Presenting findings from each step in the process, Mayhood and Gilbert will discuss the importance of a joint assessment and design-led approach, from collecting assessment data to crafting a design strategy to implementing a solution, including communication and training strategies. 1. Fox, Robert and Ameet Doshi. SPEC Kit 322: Library User Experience. Washington, DC: Association of Research Libraries. July 2011. 2. See, for example, Apple Computer engineers Don Norman, Jim Miller, and Austin Henderson's use of the term in a paper at the 1995 CHI (Computer Human Interaction) conference ([http://www.sigchi.org/chi95/proceedings/orgover/dan\\_bdy.htm](http://www.sigchi.org/chi95/proceedings/orgover/dan_bdy.htm)).

*Joe Gilbert is the User Experience Web Developer at the University of Virginia Library, where he crafts engaging, data-driven user experiences and interfaces. Before pursuing his love for standards-based web design and development, Joe led public services in the U.Va. Scholars' Lab, a library lab dedicated to innovative digital scholarship in the humanities and social sciences. He holds a bachelor's degree in English and Computer Science from Vanderbilt University and a master's degree in English from Virginia. Erin Mayhood is the User Experience Librarian at the University of Virginia where she leads efforts to improve both in-person and online experiences for faculty and students. As leader of the Library's first-ever User Experience Team, she has developed a user-centered design process that champions a collaborative, data-driven approach to service planning and development. She coordinates and/or conducts all necessary assessment to inform user-centered design activities including personae, user interface requirements, task analysis, cognitive walkthroughs, focus groups, and usability testing.*

## **Institutional Data**

### **Mining Library and University Data to Understand User Populations and Behavior**

Scott Britton (University of Miami)

Who is using the physical library? Who is using the virtual library? Are we buying the right resources? Are there patterns to library usage that would inform marketing efforts? Is the library having any impact on student learning? A research team comprised of the director for library collections, the director for library services, a computer science faculty member and the University of Miami's Center for Computational Science will try to answer these questions and others by mining library and university data.

Library data is housed in silos that make finding correlations difficult. Furthermore, the desire to protect user privacy has prevented the collection of data that could be correlated to other user-identifiable data. In 2011-2012, the a research team at the University of Miami obtained IRB approval to collect and analyze library turnstile, circulation, and logon data as well as data from the Registrar, Human Resources, and Student Activities. By placing all data sets into a single repository at the Center for Computation Science, all silos are removed, allowing data to be correlated against each other.

With all parties agreeing to provide data, the collection process has begun. Library data, including turnstile, proxy server logons, circulation, acquisitions, and catalog have already been supplied. Registrar, Human Resources and Student Activities have been provided with a secure file transfer account and will be providing their data in the next few weeks.

To receive IRB approval, all data must be made anonymous. The process to do so involves submitting identified data securely to the Center for Computation Science. They match the University ID number

to a unique project ID number and then strip away the University ID number. It is this project number that is then stored with the data and used to query across the various data sets. The process is identical to the one they use to do research on medical records. The research team has no access to identifiable data once it has been ingested in the CCS system. Query results that could potentially identify someone due to a small, unique set of elements are blocked by the system.

Sample data sets have already shown interesting views of collections use. We produced a “heat map” showing the number of circulations based on the years since publication (2012 minus publication year) for each LC classification. Even a simple question such as “What department uses us the most?” was impossible to answer with our current ILS, but with the sample data we were able to diagram and report the total number of checkouts by academic department. We expect results like these to help us evaluate areas of collection development. Understanding who is using the library, both physically and virtually will help us identify active departments as well as those who perhaps need more outreach efforts. Finally, we have great hope that use of the library will correlate to strong student achievement. And, although not directly related to library use, we are curious how students who are “engaged” with the library are otherwise engaged with other campus activities (e.g. how do frequent users of the library correlate to frequent users of the Wellness Center).

*Scott Britton joined the University of Miami Libraries in 2007 as the Director of Access, Information, and Research Services, a department that includes Education and Outreach, Access Services (which includes Circulation, Interlibrary Loan, Course Reserves, Stacks Maintenance and the Off-Campus Shelving Facility) and the Information Commons. Other areas of responsibility include copyright support, library assessment and facilities planning. Scott previously worked at Washington University in Saint Louis, where he was Head of Access Services. He has also worked in the libraries at Harvard University, Massachusetts Institute of Technology, Northeastern University, and Bowdoin College. Scott earned his M.L.S. from Simmons College and his B.A. in History and Studio Art from Bowdoin College. He is a 2011-12 Association of Research Libraries Research Library Leadership Fellow and a member of the Frye Institute class of 2005. Scott is a member of the American Library Association, Association of College and Research Libraries, and the Library Leadership and Management Association. He serves on the University of Miami Curriculum Committee and the Teaching, Learning & Technology Roundtable.*

## **Game of Clones: Using Analytical Research Data to Identify Institutional Peers and Collections Needs**

Elizabeth Brown (Binghamton University)

Purpose: Libraries routinely generate and submit data to internal and external sources including ACRL (Association of College and Research Libraries), ARL (Association of Research Libraries) and NCES (National Center for Educational Statistics.) Academic university and college campuses compile data on student performance and research activities for assessment and planning. Individually, these approaches frequently do not provide data to identify strategic planning priorities such as collection building or implementing new services. Institutional peer evaluation is an activity of growing interest within libraries with potential applications to campus assessment, strategic planning and scholarly communications activities. Institutional and library peers can be difficult to determine, especially if a campus lies on the cusp of Carnegie Classification levels or has specialized academic programs or teaching philosophies. Research analytical tools built from citation databases such as SciVal Spotlight and InCites are being marketed to libraries and campus administrators as strategic research assessment tools. Collections data from these tools can be used to determine collections gaps and future needs. Design/Methodology/Approach: The Libraries prepared comparative data on services, collections usage and staffing for campus-identified peer institutions. Data collections used

include IPEDS, ACRLMetrics, ARL Statistics and the NRC Doctoral Program Comparison Report. Peer data was generated as part of an information packet prepared as an executive briefing for a newly hired campus President. The Libraries provided access to a citation-based research analytical tool to investigate identifying collections growth areas for high-impact researchers and programs. Profile data was analyzed to identify collections needs from research activity and peer data was analyzed to compare institutional effectiveness. Findings: Analysis of comprehensive collections and service data indicate that identifying library and institutional peers requires data sources linked to multiple standards that correlate library collections data with citation or other usage metrics. Analysis of SciVal Spotlight data indicates collection needs can be met from a small number of sources, showing strategic placement of resources can reap large benefits. Researcher productivity data identified high research potential at all faculty ranks. Faculty output by department indicated quality of research can be distinguished from quantity of scholarly output. Peer institutional analysis data suggested multiple data sources provided complementary information and used in tandem with research analytical tools were a powerful indicator of quality and effectiveness of academic programs. This is true if data sources utilize different data collection techniques or productivity standards. Practical Implications/ Value: Data results can be used internally and externally to provide reports for campus units and demonstrate the Libraries can be a valuable source of research analytical data. Its value in the strategic planning process signifies the library can be an active partner to help shape the scope and direction of campus research support. Researcher data from SciVal Spotlight can be used to develop services and build outreach activities for scholarly communications. Faculty productivity lists are a rich source of potential contacts for programming, compliance with federal funding mandates, and identify key constituents for supporting a comprehensive digital preservation plan.

*Elizabeth Brown is the Scholarly Communications and Library Grants Officer at Binghamton University Libraries and serves as subject liaison for Chemistry, Physics and Astronomy, Mathematical Sciences and Materials Science. Elizabeth received a BA and MS in Chemistry, and an MLIS in Librarianship from the University of Texas at Austin.*

### **NCES Datasets and Library Value: An Exploratory Study of the 2008 Data**

David Schwieder (University of Florida)

Lisa Janicke Hinchliffe (University of Illinois, Urbana-Champaign)

**Purpose** This completed study uses a sophisticated statistical analysis to assess library impacts across more than 4000 four-year colleges and universities in the United States. This aggregate approach permits analysis of academic library performance in ways that would not be feasible with institution-specific studies, and demonstrates the assessment value of this kind of higher-level theoretical and methodological approach. **Design/Methodology/Approach** Data were merged from two 2008 National Center for Education Statistics datasets-the Academic Libraries Survey (ALS) and the Integrated Postsecondary Education Data System (IPEDS)-in order to conduct our analysis. Using the probit procedure, we analyzed how a number of key academic library variables affect two important campus-wide outcomes: graduation and year-to-year retention rates for undergraduate students. The model took the following form: **Independent Variables** Book Expenditures Serial Expenditures Audio-Visual Expenditures Library Hours Gate Count General Circulation Reference Transactions Electronic Reference Provision Attendance at Library Sessions Information Literacy Program Implementation **Dependent Variables** Graduation Rates Year-to-Year Retention Rates The model also incorporated several institutional expenditure variables as controls: Instruction Expenditures (Institution-wide) Academic Support Expenditures (Institution-wide) Student Service Expenditures (Institution-wide) **Findings** Our results suggest that academic libraries at four-year colleges and universities can make

a broad, empirically grounded claim of providing value to their institutions. Both serial expenditures and library hours particularly stood out for their positive associations with the core institutional goals of graduation and retention rates. The effects of these library factors were generally similar to or stronger than the effects of the institution-wide expenditures. Practical Implications/Value The practical value of our results depends on the goals being sought and who is seeking them. Most obviously, aggregate findings like these cannot tell us much about any specific institution; broad trends may be suggestive, but one cannot know if they hold for any individual library. Still, these aggregate results are important. First, this kind of cross-institutional analysis offers insights not attainable through institution-specific studies. For example, one of our core discoveries—that variations in library factors like hours and serial expenditures compare favorably with variations in institution-wide instruction and services spending—would almost certainly have not emerged from a single-institution study, since few schools would show sufficient variation in these key factors to permit such an analysis. Furthermore, demonstrating the generally salutary effects of libraries can enhance the credibility of institution-specific findings, thus satisfying even librarians and campus administrators primarily concerned with the performance and value of their own library. More broadly, a general demonstration of library value can appeal to stakeholders who take a more general view, such as foundations and granting agencies. Thus favorable aggregate findings can help to secure resources that accrue to the practical benefit of particular libraries and their parent institutions alike.

*David Schwieder is Assistant University Librarian at the Smathers Libraries at the University of Florida. His research interests involve application of social science approaches to studies of academic libraries, particularly focusing on assessment, student learning, and information literacy. Lisa Janicke Hinchliffe is co-chair of the Association of College and Research Libraries' Value of Academic Libraries Committee and Associate Professor for Library Administration at the University of Illinois at Urbana-Champaign. Her research interests focus on assessment, performance measurement, information literacy, student learning, and professional development for academic librarians.*

## **LibQUAL+®**

### **Tracking Academic Outcomes: What LibQUAL+® Tells Us about How Users View Information Literacy Outcomes**

Raynna Bowlby (Library Management Consultant and Simmons College)

Daniel O'Mahony (Brown University)

The purpose of this project is to review the results of the LibQUAL+® survey questions related to information literacy outcomes in order to provide an overall descriptive summary, identify possible trends over time, and analyze possible differences between user groups, institution size/type, and other characteristics. This project also begins to examine whether there may be a relationship between certain activities supporting information literacy (as identified in the National Center for Education Statistics Academic Library Survey) and the perception of library information literacy outcomes (as measured in the LibQUAL+® survey). This study focuses primarily on a wide-ranging review of LibQUAL+® data for the five information literacy outcomes questions. First, the data are examined longitudinally to determine any changes over time in user perceptions as well as any relationship with overall satisfaction of the library's support for learning, teaching and/or research. Second, the data are considered across user segments (undergraduate, graduate, faculty) to determine any differences among groups in their perception of the library's support for information literacy

outcomes. Third, data are analyzed by type of institution (possibly by Carnegie Classification or minimally by broad institutional category) to look at any differences in user perceptions about the library's role in information literacy outcomes. Finally, the study probes whether certain conditions supporting information literacy at an academic institution (described in questions included on the biennial Academic Library Survey, administered by the National Center for Education Statistics) contribute or relate to user perceptions of library information literacy outcomes. The NCES/ALS conditions include, for example, whether a post-secondary institution has incorporated information literacy into the institution's mission statement or strategic plan, or whether the institution has established a campus-wide committee to implement strategic plans for information literacy. The results of this analysis may reveal insights in describing the larger environment related to academic outcomes regarding library information literacy. This study is still underway (completion expected by the end of Summer 2012). Anticipated results include a thorough descriptive summary of the data derived from the LibQUAL+® survey questions related to information literacy outcomes as well as possible trends over time. The study also will document the relationship between user perceptions of the library's contribution to information literacy outcomes and the reported level of institutional commitment to information literacy. Despite the fact that the LibQUAL+® survey has included five survey questions about information literacy outcomes for nearly a decade, discussion of this aspect of the survey is practically non-existent throughout the community of LibQUAL+® institutions. Indeed, despite an extensive body of research and practical articles and presentations about LibQUAL+®, the authors could not identify any that focused on the information literacy outcomes questions. This research presents a baseline review of this underutilized area of the LibQUAL+® survey and will lead to a better understanding in the library assessment arena of how users perceive the library's contribution to their academic outcomes. Further, it will place these perceptions in the context of the larger environment supporting academic outcomes in higher education.

*Raynna Bowlby is an Associate of Library Management Consultant and is affiliated with Simmons College Graduate School of Library and Information Science. She contributes to the Association of Research Libraries' Organizational Performance Assessment for Libraries (OPAL) initiative and provides consulting and training for libraries on LibQUAL+®, assessment, organizational development and effectiveness. She has an MLS from Simmons College and an MBA from the University of Rhode Island. Daniel O'Mahony is Director of Planning and Assessment at Brown University Library. He has overseen or participated in numerous assessment activities, including the administration and interpretation of data from the 2002, 2005, 2008, and 2012 LibQUAL+® surveys on campus. He has an MSLS from Florida State University and a BA from the University of Florida.*

### **Closing the Loop: Are Libraries Communicating Assessment Results to Students?**

Meg Scharf (University of Central Florida)

Nancy Cunningham (University of South Florida)

According to Sarah Watson (in *Tertiary Education and Management*, volume 9, number 2, 2003) and others, the most demanding and essential part of "closing the loop" with assessment is not just using the data for process/learning improvement by libraries and librarians. It is informing students that their input has been translated into action. If students do not see action resulting from their feedback, they could become unwilling to participate in the assessment process. What are current and best practices of libraries to display and disseminate feedback gathered from students? The purpose of this project is to gather data on how libraries are "closing the loop" by communicating to students the results of feedback gathered through assessment including LibQUAL+®.

This study began with a thorough review of the web sites of 150 academic libraries which administered the LibQUAL+® survey either in 2010 or 2011. The front page, site indexes, posted documentation including annual reports or newsletters, and, if available, site search features were used to determine if the LibQUAL+® survey results or other assessment results were published, or if actions taken in answer to assessment results were listed or published. To better understand any other assessment feedback libraries are providing to students, a survey will be sent out to the assessment librarian or dean or director of 50 LibQUAL+® participating libraries to solicit additional information. The survey will also ask about impediments to “closing the loop” such as a lack of time, or reluctance to deal with negative student feedback, or hesitation to answer assessment responses on topics that are beyond the control of the library. Review of the websites will be completed during spring 2012 and during summer 2012, the survey will be sent. The data from this website analysis and survey will serve to provide insights into if and how libraries are communicating assessment feedback to students. Responses from the survey will also provide insights into best practices for “closing the loop”.

*Nancy Cunningham has been the Director of Academic Services at the University of South Florida's Tampa Library since 2009. She received her M.L.I.S. degree from U.C. Berkeley in 1986 and M.B.A. from St. Mary's University in San Antonio, Texas in 1997. Since 1999, Meg Scharf has been the Associate Director for Public Services at the University of Central Florida (UCF). She received her M.L.S. degree from Indiana University Bloomington, an M.B.A. from UCF, and a B. A. from Saint Mary's College, Notre Dame, IN.*

## **York University Libraries Implementation of LibQUAL+® Triads**

Dany Savard (York University)

Marcia Salmon (York University)

Aaron Lupton (York University)

**Purpose:** This paper will offer a case analysis of the 2012 pilot implementation of LibQUAL+® Triads at York University Libraries. Considering LibQUAL+® Triads' capacity to help eliminate untrustworthy responses from our survey of user perceptions of service quality at YUL, the paper will discuss implementation decisions, the perceived merits of the tool, conclusions about its potential drawbacks and lessons learned for future implementations. **Methodology:** This paper will describe how LibQUAL+® Triads was implemented at York University Libraries. Topics will include demographic information about York University and York University Libraries; determination of which constituents from the York University community were selected for the survey; how the random sampling was conducted; the timeline and duration of the survey; participation rates and a discussion of how York University Libraries communicated with the community about the survey. **Findings:** The key quantitative and qualitative results of the LibQUAL+® Triads implementation at York University Libraries will be discussed. User perceptions of Affect of Service, Library as Place, and Information Control in both the Triads survey and previous standard LibQUAL+® surveys will be discussed in relation to Triads' capacity to provide additional evidence of trends in perceived library service quality. **Practical Implications:** The paper will discuss the benefits and disadvantages of using LibQUAL+® Triads to measure perceived user satisfaction. This will be achieved by referring to examples from the results of the 2012 LibQUAL+® Triads survey and by undertaking a comparative exercise between these results and those of previous standard LibQUAL+® surveys at York University Libraries. Since the LibQUAL+® Triads pilot was run separately from a standard LibQUAL+® implementation at York, we will examine how the survey tool can be used in conjunction with previous LibQUAL+® Long and LibQUAL+® Lite results. Specifically, the use of LibQUAL+® Triads

intraindividual score reliability coefficients as controls for data trustworthiness will be discussed in relation to differences and/or similarities between LibQUAL+® Long, LibQUAL+® Lite results and LibQUAL+® Triads results.

*Aaron Lupton is the eResources Librarian at York University where he is responsible for the selection, acquisition, renewal, and cancellation of electronic resources/collections. He represents York on both the provincial (OCUL IR) and national (CRKN) consortia. He is the current chair of the assessment committee at York University Libraries. Marcia Salmon is a Cataloguing Librarian at York University Libraries. She also contributes to reference services at the Steacie Science and Engineering Library at York University. She received an honours B.Sc. in Biology and Applied Educational Psychology from University of Toronto, and an MLIS from the University of Western Ontario. Dany Savard is a Reference Librarian at York University. He is responsible for the provision of reference services, the planning of information literacy initiatives, and collections development at the Leslie Frost Library. He is a current member of the assessment committee at York University Libraries.*

### **LibQUAL+® Triads Pilot: Results from the University of Manitoba Libraries**

Marie Speare (University of Manitoba)

The University of Manitoba participated in the LibQUAL+® Triads project in the spring of 2012. Results and user response to the survey will be described. Ranking of the perceived means from the 2007 and 2010 surveys will be compared to the results received for the LibQUAL+® Triads project. The LibQUAL+® Triads protocol provides another approach to identify how well our library is meeting our user needs, in particular for questions/items that score close to one another. This paper will provide an assessment of the Triads project and thoughts for improving the protocol. The LibQUAL+® Triads project is currently in progress. The survey is expected to close by the middle of April.

*Marie Speare is the Chair of the University of Manitoba Libraries Assessment Committee. She has planned and organized four LibQUAL+® surveys between 2003 and 2010.*

## **Collections / E-Resources II**

### **User-defined Valued Metrics for Electronic Journals**

Katherine Chew (University of Minnesota)

James Stemper (University of Minnesota)

Caroline Lilyard (University of Minnesota)

Mary Schoenborn (University of Minnesota)

#### **Purpose**

For years, libraries have searched for the perfect metrics to help make tough decisions on what journals to retain. Download statistics do not tell the whole story; just because an article is downloaded does not mean it is later read, liked, or cited. The University of Minnesota Libraries are developing a set of user-defined value-based metrics that would inform collection management practices. In addition to analyzing an array of vendor-generated metrics, parsing locally-generated

authentication logs yields useful data that only the institution can provide. "Affinity strings," derived from the university's central authentication system, anonymously capture the user's academic department and degree program or position at the university, providing a granular picture of journal use down to the title level. This data assists in determining variations of resource use at the discipline and degree/employee position level, creating as accurate a picture of user activity as possible and – when combined with download and institutional citation data – determining the value that our users assign to our collection through their decisions about which journal articles to download, read, and cite.

## Design

Building on work done by CDL on journal value metrics assessment, we identified metrics that are utilized to determine e-journal retainability. These include data from: OpenURL link resolver data on article view requests, COUNTER-compliant data on article downloads, Journal Citation Reports Impact Factor, EigenFactor, Thomson Local Journal Use Reports, and the locally developed Affinity Strings. Two years of data were integrated into a single spread sheet.

User value will be assessed in three overall categories: (1) utility, (2) quality, and (3) cost effectiveness, using rank correlation coefficients to compare the different metrics. Affinity String data will be correlated with the results to determine any discipline or degree level differences. A composite score will be assigned to each journal to assess its overall value in comparison to other journals within the same broad subject category.

## Project questions:

1. Reading value (utility): Does SFX data combined with Affinity Strings data provide a "good enough" departmental view of user activity, such that COUNTER data is expendable?
2. Citing value (quality): Which is the better metric for representing value through citation behavior by users – Impact Factor or Eigenfactor? Do either SFX or COUNTER downloads sufficiently correlate with local citations via LJUR or external citations via impact factor metrics? If both of them do, are impact factors expendable?
3. Cost value (cost effectiveness): How should these reading and citing values be combined with our cost data to create a "cost-per-activity" metric that meaningfully informs collection management decisions?

## Findings

Project is currently at the data analysis stage; results are expected to be completed by summer.

## Practical Implications/Value

Collection management librarians and library users can benefit from a viable, more accurate metric for use and value of library resources than cost-per-download, which would ensure that the most needed/valued resources are available to further research and learning.

*In her over twenty-five year library career, Katherine Chew has worked in Air Force Base Libraries, hospital, clinic and academic medical libraries. She is currently the Associate Director for Research, Collections and Access Services for the Health Sciences Libraries at the University of Minnesota. Jim Stemper is the licensing coordinator at the University of Minnesota Libraries, and chair of its Library Assessment Infrastructure project. The project goal is to develop framework, implement infrastructure, and provide organizational capacity to capture, manage, and exploit data about activity and use of Libraries' assets that enables strategic directions and assessment. Caroline Lilyard holds the MPA from the Humphrey School of Public Affairs at University of Minnesota and MLIS from the University of Wisconsin-Milwaukee. Her research interests include research communities, corporate involvement in humanitarian aid and social entrepreneurship. As collection manager for 6 departments, she feels selection metrics are a critical evaluative tool. Mary Schoenborn is the University of Minnesota Libraries liaison to the Humphrey School of Public Affairs and the Carlson School of Management. Mary holds a master's degree from the Humphrey School. Her areas of research interest include public and nonprofit management/leadership and global development policy.*

### **Applying Performance Measurement to Safeguard Budgets: Qualitative and Quantitative Measurement of Electronic Journal Packages**

Selena Killick (Cranfield University)

In the current financial climate effective performance measurement has become a vital tool for library managers. This paper presents a case study from Cranfield University in the United Kingdom on qualitative and quantitative techniques employed to measure the performance of electronic resources. Cranfield University Libraries have developed a process for systematic and sustainable assessment of its electronic resources. Initially focused on electronic journal packages, the process enables the library service to demonstrate smart procurement to key stakeholders. Quantitative key performance indicators were developed based on the COUNTER usage statistics, internal financial information and population data. A systematic process of capturing, storing and analysing using data was developed. In order to make the process sustainable a template was developed to calculate all the derived metrics and present the key performance indicators in a format suitable to senior stakeholders. It was soon discovered that quantitative measures would not enable the library to fully assess the performance of the collection on their own. Through academic liaison interviews the Library staff embarked upon a process to capture the qualitative information pertinent to the resources. A template was used for each package documenting who is using the resource, how they are using it, and what impact any cancellation would have on the strategic goals of the organisation. The combined approach of both quantitative metrics and qualitative factors enabled the library to effectively demonstrate the value of the electronic journal packages. The results were successfully used to lobby against a proposed resources cut, safeguarding the electronic journals from budget reductions. Lessons learnt from the development of the process along with next steps are presented. This paper will be of interest to those involved in library collection management, and library staff with a remit in performance measurement. In particular it may assist the development of deeper understanding of measuring the value and impact of electronic library collections, and will also therefore be of value to all those concerned with library strategy and development.

*Selena Killick is the Library Quality Officer at Cranfield University, with responsibility for analysing customer feedback and library performance data. She develops and implements models to guide planning and evaluation of electronic resources. She also supports European LibQUAL+® participants, and regularly advises libraries on an international basis on library surveys.*

## Electronic Collection Assessment and Benchmarking to Demonstrate the Value of Electronic Collections

Stephen Miller (University of Maryland University College)

**Purpose:** In a time of budget constraints, Information & Library Services at the University of Maryland University College, focused primarily on online distance education, needed to effectively demonstrate the value of the electronic resources that make up the library collections to key stakeholders in order to ensure continued funding and support. **Design/Methodology:** Two projects were developed and undertaken to generate quantitative and qualitative data for making the case that the UMUC Library electronic collections effectively support UMUC's curriculum and that they are similar to the collections held and the collection expenditures of peer institutions. The first project was a library program review featuring an evaluation by external reviewers of how well the collections match the curricular needs in four key areas of importance to UMUC's strategic focus: Cybersecurity/IT, business and management, education and Community College leadership, and arts & humanities/social sciences. Librarians from four institutions were hired as consultants to conduct reviews and provide detailed reports. The second project involved benchmarking through the evaluation of the library research database holdings of peer institutions, in addition to analysis of peer group statistical data. A peer group was identified, NCES data was analyzed, and library database holdings lists of the peer group were harvested and then analyzed in comparison with UMUC's holdings. **Findings:** For project 1, the consultants determined that UMUC's holdings are solid for effective curricular support, and the library was able to obtain additional funding for two additional resources based on the consultant's recommendations. For project 2, it was found that other peer group institutions' collection expenditures are generally higher than UMUC's, and that UMUC's database collection is, at its core, shown to be of similar composition to the peer group's holdings. In addition, library databases not currently licensed by UMUC were identified for possible inclusion based on peer holdings. Overall, there was strong external validation of the quality and effective selection of the UMUC Library research database holdings, and of the effectiveness of the collection management process utilized by the Library. The project initially resulted in additional funding for additional database collections, providing tangible benefits to the UMUC community, and the project findings will be used in the future to justify continued support of library resources in university-level budgetary and strategic planning. **Practical Implications:** A number of important methodological features of this research will be discussed, including how external reviewers were selected and how their work was coordinated. The issues involved in selection of the peer group for benchmarking and the techniques used, plus problems found in harvesting lists of database holdings from each institution and in analyzing and making sense of the data, will be discussed. The methodology and techniques used represent a successful extension of academic program review methodology to libraries, as well as effective peer-group benchmarking, and they can be used by others to effectively advocate for continued funding and support of their library programs and resources.

*Stephen Miller is Associate Provost for Information & Library Services at University of Maryland University College (UMUC) He previously held positions Duke University and the University of Georgia and holds a MBA from UMUC and a MSLS from the University of Kentucky.*

## Plenary Session III

### Quality Frameworks in Academic Libraries: Organizing and Sustaining Library Assessment Activities

Sarah Murphy (The Ohio State University)

Purpose: Academic libraries currently use a number of interchangeable terms to describe their efforts to study the effectiveness of their services and programs, including assessment, quality improvement, impact, evaluation, and evidence-based librarianship. Most, however, lack the knowledge or resources to move beyond highly focused, piecemeal measures of service quality, learning outcomes, and website usability. A practical and sustainable assessment program not only requires human, financial, and capital resources, but a formal structure, or framework to organize library assessment activities. While a few libraries have adopted established quality improvement frameworks, such as Lean Six Sigma or the Baldrige Criteria for Performance Excellence, others have either consciously or unconsciously started to incorporate elements of such frameworks into their practice. This study examined whether academic libraries are moving towards formally adopting established quality frameworks or informally adopting such frameworks to structure and organize their assessment programs. It also gauged whether academic librarians were interested in learning more about established quality improvement frameworks as a means for supporting and realizing sustainable change within their organizations. Research Design: An online survey was distributed in July 2011 to 536 academic libraries that indicated they employed more than 10 professional librarians and had a Carnegie Foundation Basic Classification of Master's/S or above in the 2008 Academic Library Survey conducted by the National Center for Education Statistics. (<http://nces.ed.gov/surveys/libraries/>) Specifically, the websites of the libraries included on this list were used to obtain the email of the highest ranking professional librarian responsible for assessment or quality improvement. The survey was then distributed to this individual. If this librarian could not be identified, the survey was distributed to the email of the library director, with a request that it be forwarded to the individual responsible for assessment or quality improvement in his or her library. Results: 158 of the 536 surveys distributed were returned, representing a 30.56% response rate. While only eight survey participants indicated that they used an established quality improvement framework to structure or organize their assessment program, 36 participants working without a formal framework did indicate that they had some system to identify, prioritize, and organize their assessment projects. Almost all respondents (n=151) indicated their library leaders promote and support the gathering and utilization of assessment or quality improvement data. Only 44% (n=70), however, indicated their library provides a budget to support their library's assessment or quality improvement program and only 52% (n=83) noted their library had staff specifically assigned to coordinate their library's assessment or quality improvement program. A majority of respondents (83%, n=132) indicated they would be interested in learning more about quality improvement frameworks for libraries. Implications/Value: Few academic libraries formally employ an established quality improvement framework to structure and sustain their assessment programs or have a formal system to identify, prioritize, and organize their assessment projects. There is an interest among academic librarians responsible for their library's assessment program in learning more about quality improvement frameworks for libraries.

*Sarah Anne Murphy is currently Coordinator of Assessment for The Ohio State University Libraries. Murphy earned a MBA from the OSU Fisher College of Business in 2008 and her MLS from Kent State University in 2000. She has published papers on Lean Six Sigma, mentoring, and issues related to veterinary medicine libraries.*

## Library Assessment Today: More than Numbers

Jim Self (University of Virginia)

Purpose: Research libraries have been collecting statistics for more than a century. Initially the counts were limited to input factors: collection size, staffing, budgeting. Eventually output variables were added: circulation, reference transactions, interlibrary loan. The development of the user-centered library during recent years has brought forth a new set of data elements with an emphasis on customer feedback, resource sharing, qualitative information, performance measures, and electronically generated data. The term 'assessment' has come into vogue, reflecting the broader scope of data collection and measurement. Libraries and library organizations have responded to the changing times through a number of initiatives, including the ARL New Measures Project, development of the LIBQUAL+® survey, and the ARL onsite assessment consulting service, originally called 'Making Library Assessment Work' and later renamed 'Effective, Sustainable, and Practical' assessment. Findings from this effort have been published and reported at various venues. The Library Assessment Conference grew out of this assessment project. This paper updates the previous reports, and outlines the current state of library assessment by describing best practices and notable innovations at major libraries. Design/Methodology/Approach To collect the data, I visited ten large research libraries.\* Each of these libraries participated in the ARL consulting project between 2005 and 2009. By investing funds and staff time in the project, these libraries had demonstrated a strong interest in assessment. The libraries comprise a varied sample of the ARL membership, including both public and private institutions, as well as some larger and smaller libraries within the membership. At each library I interviewed administrators, managers, assessment specialists, and operational personnel, compiling a record of current practices and innovations. The findings from the recent visits are being compared with data collected earlier at each of the libraries. Findings The variety and scale of library assessment activities have expanded tremendously in the past decade. There is more training of staff on assessment topics, and assessment is now seen by staff as a core activity. Large scale customer surveys, either customized instruments or standardized tools, are commonplace, if not quite ubiquitous. There is more examination of collections from a customer viewpoint, and as an area of collaboration with other libraries. Some assessment programs are integrating with user experience initiatives, moving beyond usability testing. We are also finding more efforts to integrate assessment, strategy, and performance measurement. Practical Implications/Value By offering a picture of the state of library assessment, including both the successes and the shortfalls, this paper will inform practitioners and administrators. It will suggest innovations and improvements that may be implemented at other libraries. \*North Carolina, Emory, Tennessee, South Carolina, Dartmouth, Boston University, Massachusetts, Connecticut, New York University, Johns Hopkins.

*Jim Self is Director of Management Information Services at the University of Virginia Library. He has published and presented widely, and has visited more than forty academic libraries as an assessment consultant.*

## Presenter Index

- Abbasi, Neda.** TEALS (Tool for Evaluation of Academic Library Spaces) Project: Evaluating Physical Library Spaces
- Askew, Consuella.** Using a Mixed Method Approach to Assessing Roaming Services: A Case Study
- Baker, Gayle.** Methods for Measuring Return on Investment for Digitized Special Collections
- Bakkalbasi, Nisa.** Assessing Assessment: A Framework to Evaluate Assessment Practices and Progress for Library Collections and Services
- Bakkalbasi, Nisa.** Utilizing Cross-Campus Collaboration to Improve the Assessment of Information Literacy
- Ball, Marissa.** Using a Mixed Method Approach to Assessing Roaming Services: A Case Study
- Bauer, Kathleen.** Multi-Institution Circulation Patterns in a Cooperative Interlibrary Loan Program
- Belanger, Jackie.** Project RAILS: Rubrics, Results, & Recommendations
- Besara, Rachel.** Increasing the Impact & Value of a Graduate Level Research Methods Course by Embedding Assessment Librarians & Library Assessment
- Bibb, Sheila.** Student Information Seeking Behaviors: A Case Study in Collaboration
- Bietila, David.** Beyond Usability: Building Discovery Tool Requirements through User Stories
- Birch, Ben.** Assessment of the Use, Value and ROI of All Academic Library Services
- Black, Jo.** The Value of Our People: Towards a Scorecard for Human Capital in Academic and Research Libraries
- Bowlby, Raynna.** Tracking Academic Outcomes: What LibQUAL+® Tells Us about How Users View Information Literacy Outcomes
- Bowles-Terry, Melissa.** Impact of Library Instruction in Different Academic Disciplines: An Analysis of Student Transcripts and Course Syllabi
- Bradshaw, Agnes.** Shop Your Way to Service Excellence: Secret Shopping for Academic Libraries
- Britton, Scott.** Mining Library and University Data to Understand User Populations and Behavior
- Brown, Elizabeth.** Game of Clones: Using Analytical Research Data to Identify Institutional Peers and Collections Needs
- Brown, Jeanne.** Quest for Continuous Improvement: Applying Feedback and Data Gathered through Multiple Methods to Evaluate and Improve Use of a Library's Discovery Tool
- Chadwell, Faye.** Consortia Value: The Orbis Cascade Alliance
- Chang, Bertha.** Practical Research for Library Space and Service Design
- Chew, Katherine.** User-defined Valued Metrics for Electronic Journals
- Colburn, Selene.** Herding Cats, Knitting Fog, and Nailing Pudding to the Wall: Toward a Mixed-methods Approach to Evaluating Social Media Marketing in Libraries

- Cook, Colleen.** The ARL Investment Index Revisited: In Search of Reliable and Valid Indicators of Extensiveness of Research Libraries in the 21st Century
- Crowe, Kathryn.** Shop Your Way to Service Excellence: Secret Shopping for Academic Libraries
- Cunningham, Nancy.** Closing the Loop: Are Libraries Communicating Assessment Results to Students?
- David, Ravit.** "It's All in the Metadata." Towards a Better QA for Ebooks
- Davidson, Catherine.** Mining eResource Data to Reveal Hidden Assets - How One School Dug Deeper into MINES to Illustrate the Value of eResources
- DeFranco, Francine.** Do We Have What it Takes? Assessing Liaison Librarians' Skill Sets to Build Strong Partnerships and Ensure Better Outreach in a Quickly Changing Research and Learning Environment
- Dolinger, Elizabeth.** Rolling It Up: The Evolution of an Information Literacy Assessment Plan
- Donahue, Annie.** Charting Success: Using Practical Measures to Assess Student Learning in a Peer2Peer Research Model
- Eaton, Judith.** Higher Education in a New Era of Public Accountability. What Does This Mean for You?
- Elkadi, Hisham.** TEALS (Tool for Evaluation of Academic Library Spaces) Project: Evaluating Physical Library Spaces
- Estridge, Honora.** Practical Research for Library Space and Service Design
- Farkas, Meredith.** Library Faculty and Instructional Assessment: Creating a Culture of Assessment through the High Performance Programming Model of Organizational Transformation
- Felix, Elliot.** Designing and Assessing Library Services
- Foster, Nancy Fried.** Multidisciplinary Rethinking and Redesign of Library Space
- Fox, Robert.** Closing Panel
- Franklin, Brinley.** The ARL Investment Index Revisited: In Search of Reliable and Valid Indicators of Extensiveness of Research Libraries in the 21st Century
- Franklin, Brinley.** MINES for e-Books
- Fulcher, Keston.** Assessing Assessment: A Framework to Evaluate Assessment Practices and Progress for Library Collections and Services
- Gilbert, Joe.** Defining User Experience in Libraries
- Gola, Christina.** Collaborating with Campus Assessment Services to Evaluate Information Literacy Skills of Graduating Undergraduates
- Greenberg, Mark.** Data Driven Decision Making: A Holistic Approach to Assessment in Special Collections Repositories
- Griffin, Melanie.** Data Driven Decision Making: A Holistic Approach to Assessment in Special Collections Repositories

**Hall, Ian.** The Value of Our People: Towards a Scorecard for Human Capital in Academic and Research Libraries

**Hersey, Denise.** Do We Have What it Takes? Assessing Liaison Librarians' Skill Sets to Build Strong Partnerships and Ensure Better Outreach in a Quickly Changing Research and Learning Environment

**Hiller, Steve.** Making the Case for Institutional Investment in Libraries: The Value of Evidence-Based Narratives

**Hiller, Steve.** Consortia Value: The Orbis Cascade Alliance

**Hinchliffe, Lisa.** Library Faculty and Instructional Assessment: Creating a Culture of Assessment through the High Performance Programming Model of Organizational Transformation

**Hinchliffe, Lisa.** NCES Datasets and Library Value: An Exploratory Study of the 2008 Data

**Hinchliffe, Lisa.** What Do We Want to Know: Articulating a Research Agenda for the Value of Academic Libraries

**Horn, Anne.** TEALS (Tool for Evaluation of Academic Library Spaces) Project: Evaluating Physical Library Spaces

**Horowitz, Lisa.** The Assessment Needs of a Data-Driven Organization

**Hu, Rachael.** Understanding the User's Mental Model: An Evolving Design and Assessment Strategy for Archival Collection Description

**Huisman, Rhonda.** The A-Team: Making a Plan Come Together Across Campus

**Jaggars, Damon.** Collaborative Ethnographic Needs Assessment of Doctoral Students in the Humanities

**Jones, Jennifer.** Secret Shoppers in the Library

**Ke, Irene.** Collaborating with Campus Assessment Services to Evaluate Information Literacy Skills of Graduating Undergraduates

**Killick, Selena.** Applying Performance Measurement to Safeguard Budgets: Qualitative and Quantitative Measurement of Electronic Journal Packages

**King, Donald.** Assessment of the Use, Value and ROI of All Academic Library Services

**Kinsley, Kirsten.** Increasing the Impact & Value of a Graduate Level Research Methods Course by Embedding Assessment Librarians & Library Assessment

**Kopp, Jason.** Utilizing Cross-Campus Collaboration to Improve the Assessment of Information Literacy

**Kyrillidou, Martha.** The ARL Investment Index Revisited: In Search of Reliable and Valid Indicators of Extensiveness of Research Libraries in the 21st Century

**Lewis, Barbara.** Data Driven Decision Making: A Holistic Approach to Assessment in Special Collections Repositories

**Lewis, Vivian.** Collaborative Measures Building Using the Balanced Scorecard in North American Libraries

**Lilyard, Caroline.** User-defined Valued Metrics for Electronic Journals

**Lombardi, John.** Living in the Cloud: Who Owns It, Who Pays for It, Who Keeps It Safe, and Will My Kids Inherit the Wind?

**Long, Matthew.** Research Support Services for Scholars: Understanding Evolving Research Practices

**Lundrigan, Courtney.** "Feels Like You've Hit the Lottery." Assessing the Implementation of a Discovery Layer Tool at Ryerson University

**Lupton, Aaron.** York University Libraries Implementation of LibQUAL+® Triads

**Lupton, Aaron.** Mining eResource Data to Reveal Hidden Assets - How One School Dug Deeper into MINES to Illustrate the Value of eResources

**Mahan, David.** Using Library User Surveys to Assess the Library's Impact on Student Outcomes

**Malenfant, Kara.** What Do We Want to Know: Articulating a Research Agenda for the Value of Academic Libraries

**Manuel, Kevin.** "Feels Like You've Hit the Lottery." Assessing the Implementation of a Discovery Layer Tool at Ryerson University

**Martinelli, Meredith.** One Size Doesn't Fit All? Harnessing Multiple Assessment Frameworks to Build the Value Proposition for the Organisation

**Mathews, Brian.** Too Much Assessment, Not Enough R&D

**Mayhood, Erin.** Defining User Experience in Libraries

**McGowan, Jamie.** Assessing the Library's Grants Program

**Mengel, Elizabeth.** Collaborative Measures Building Using the Balanced Scorecard in North American Libraries

**Miller, Stephen.** Electronic Collection Assessment and Benchmarking to Demonstrate the Value of Electronic Collections

**Mills, Jenny.** Project RAILS: Rubrics, Results, & Recommendations

**Monroe-Gulick, Amalia.** Conversations with Students: Assessment Leads to Adjustment

**Murack, Jennie.** The Assessment Needs of a Data-Driven Organization

**Murphy, Sarah.** Quality Frameworks in Academic Libraries: Organizing and Sustaining Library Assessment Activities

**Nutefal, Jennifer.** Closing Panel

**Oakleaf, Megan.** Project RAILS: Rubrics, Results, & Recommendations

**Oakleaf, Megan.** Assessment of Information Literacy as a Student Learning Outcome: Overcoming Barriers and Achieving Standards

**Oakleaf, Megan.** What Do We Want to Know: Articulating a Research Agenda for the Value of Academic Libraries

**Oakleaf, Megan.** Closing Panel

- O'Mahoney, Daniel.** Tracking Academic Outcomes: What LibQUAL+® Tells Us about How Users View Information Literacy Outcomes
- Owen, Sue.** TEALS (Tool for Evaluation of Academic Library Spaces) Project: Evaluating Physical Library Spaces
- Paulo, Jonathan.** Utilizing Cross-Campus Collaboration to Improve the Assessment of Information Literacy
- Peasley, Jennifer.** One Size Doesn't Fit All? Harnessing Multiple Assessment Frameworks to Build the Value Proposition for the Organisation
- Perry, Katherine.** The ICOLC Balanced Scorecard Pilot: The Value of Collaborative Parallel Play
- Petr, Julie.** Conversations with Students: Assessment Leads to Adjustment
- Plum, Terry.** MINES for e-Books
- Potter, William Grey.** The ARL Investment Index Revisited: In Search of Reliable and Valid Indicators of Extensiveness of Research Libraries in the 21st Century
- Proffitt, Merrilee.** Assessing Special Collections: How Do We Get from Where We Are to Where We Need to Be?
- Quirion, Christine.** The Assessment Needs of a Data-Driven Organization
- Rawls, Michael.** Measuring the Impact of Electronic Library Materials on the University's Research Mission
- Reed, Donna.** Consortia Value: The Orbis Cascade Alliance
- Rossmann, Brian.** Did We Get What We Paid For? An Institutional Assessment of User Behavior, User Expectations, and System Performance of Web Scale Discovery Tools
- Rossmann, Doralyn.** Did We Get What We Paid For? An Institutional Assessment of User Behavior, User Expectations, and System Performance of Web Scale Discovery Tools
- Rutner, Jennifer.** Research Support Services for Scholars: Understanding Evolving Research Practices
- Salmon, Marcia.** York University Libraries Implementation of LibQUAL+® Triads
- Sandore, Beth.** Assessing the Library's Grants Program
- Saunders, Laura.** Assessment of Information Literacy as a Student Learning Outcome: Overcoming Barriers and Achieving Standards
- Savard, Dany.** York University Libraries Implementation of LibQUAL+® Triads
- Scharf, Meg.** Closing the Loop: Are Libraries Communicating Assessment Results to Students?
- Schoenborn, Mary.** User-defined Valued Metrics for Electronic Journals
- Schwieder, David.** NCES Datasets and Library Value: An Exploratory Study of the 2008 Data
- Searing, Susan.** Is Experience the Best Teacher? Field Experience and Student Learning in LIS Education Programs
- Self, James.** The ICOLC Balanced Scorecard Pilot: The Value of Collaborative Parallel Play

- Self, Jim.** Library Assessment Today: More than Numbers
- Sites, Martha.** Telling the Story: Library Assessment for University Leadership
- Simon, John.** Dollars and Sense: the New Financial Realities of Higher Education
- Slight-Gibney, Nancy.** Consortia Value: The Orbis Cascade Alliance
- Speare, Marie.** LibQUAL+® Triads Pilot: Results from the University of Manitoba Libraries
- Steele, Patricia.** Multidisciplinary Rethinking and Redesign of Library Space
- Stemmer, John.** Using Library User Surveys to Assess the Library's Impact on Student Outcomes
- Stemper, James.** User-defined Valued Metrics for Electronic Journals
- Sundre, Donna.** Assessing Assessment: A Framework to Evaluate Assessment Practices and Progress for Library Collections and Services
- Sundre, Donna.** Utilizing Cross-Campus Collaboration to Improve the Assessment of Information Literacy
- Tancheva, Kornelia.** Collaborative Ethnographic Needs Assessment of Doctoral Students in the Humanities
- Tenopir, Carol.** Assessment of the Use, Value and ROI of All Academic Library Services
- Thomas, Dana.** "It's All in the Metadata." Towards a Better QA for Ebooks
- Thompson, Bruce.** The ARL Investment Index Revisited: In Search of Reliable and Valid Indicators of Extensiveness of Research Libraries in the 21st Century
- Tingle, Brian.** Understanding the User's Mental Model: An Evolving Design and Assessment Strategy for Archival Collection Description
- Tolson, Donna.** Telling the Story: Library Assessment for University Leadership
- Town, Stephen.** The Value of Our People: Towards a Scorecard for Human Capital in Academic and Research Libraries
- Vaidyanathan, Siva.** Library Assessment and Big Data: The need for Ethical, Legal and Philosophical Analysis
- Walter, Scott.** Is Experience the Best Teacher? Field Experience and Student Learning in LIS Education Programs
- Warlick, Stefanie.** Utilizing Cross-Campus Collaboration to Improve the Assessment of Information Literacy
- Webb, Anda.** Telling the Story: Library Assessment for University Leadership
- Whitson, Liz.** Assessment of the Use, Value and ROI of All Academic Library Services
- Williams, Sara.** Utilizing Cross-Campus Collaboration to Improve the Assessment of Information Literacy
- Wilson, Frankie.** The Quality Maturity Model: Your Roadmap to a Culture of Quality

**Wilson, Lizabeth.** Making the Case for Institutional Investment in Libraries: The Value of Evidence-Based Narratives

**Wise, Ken.** Methods for Measuring Return on Investment for Digitized Special Collections

**Wray, Tanner.** Is Experience the Best Teacher? Field Experience and Student Learning in LIS Education Programs

**Yan, May.** "Feels Like You've Hit the Lottery." Assessing the Implementation of a Discovery Layer Tool at Ryerson University