

The Third Northumbria International Conference on Performance Measurement in Libraries and Information Services¹

full report by Amos Lakos, University of Waterloo, 1 November 1999

The Third Northumbria International Conference on Performance Measurement in Libraries and Information Services—sponsored by the Department of Information and Library Management at the University of Northumbria at Newcastle—took place August 26 to 31, 1999, at Longhirst Hall, just north of Newcastle upon Tyne. The theme of the Conference was "Value and Impact" of performance measurement activities in libraries. This conference follows upon two earlier successful conferences, the proceedings of which are available from Information North.² Information North will publish the current conference proceedings in early 2000 for the Department of Information and Library Management, University of Northumbria at Newcastle.

The conference organizers firmly believed that in the two years since 1997 there has been more than enough research and practice of performance measurement in libraries to justify a new conference. The conference aims were to provide a venue for discussing various library measurements and assessment issues and activities, to exchange experiences, to increase awareness of current research and to identify issues for further study and work. The goal was to focus on values and ways to translate them into outcomes and impacts.

The papers reflect the emphasis on assessing values and identifying and assessing outcomes and impacts of library services. Some major themes are emerging:

- Defining and Measuring Values.
- Electronic Library and Network Measurement Indicators.
- Benchmarking.
- The Scorecard Models and their Use in Performance Measurements.
- Government Involvement in Library Assessments.
- Quality Service Measurements and Applications.
- Management Information Services.
- Activity Based Costing

In Europe, increased cooperation between libraries across national boundaries is continuing, with European Union support. A major trend is emerging with governments insisting on some demonstrated positive outcomes and accountability from local governments and educational institutions, and by implication from libraries. The profession is scrambling to develop meaningful and comparable networked services indicators. The trend from quantitative measures toward qualitative impact measures is continuing.

A total of 43 papers were presented, including four Keynote Speakers and four Invited Speakers. The proceedings will include 45 papers because two presenters could not attend.

Total attendance was 137 persons from 27 countries—a truly international gathering. U.S. participation increased from six to fifteen. Canadian participation remains at three. Almost all were from ARL and CARL member libraries. The importance of the topics covered in this conference warrant increased publicity.

The U.S. participants were:

John Carlo Bertot–State University of New York at Albany
Vicki Coleman–University of Kansas
Colleen Cook–Texas A&M University
Michael Havener–University of Rhode Island
Fred Heath–Texas A&M University
Dean K. Jue–Florida State University
Josephine Kibbee–University of Illinois at Urbana-Champaign
Christie M. Koontz–Florida State University
Keith Curry Lance–Library Research Service
Charles McClure–Florida State University
Marjorie Murfin–Ohio State University Libraries
Shelley Phipps–University of Arizona
Carolyn Radcliff–Kent State University
James Self–University of Virginia
Joan Stein–Carnegie Mellon University

The Canadian participants were:

Amos Lakos–University of Waterloo
Cathy Matthews–Erindale College, University of Toronto
Toni Olshen–York University

A full list of participants is available on the Web at <<http://ilmb.unn.ac.uk/dels.pdf>>. (*page no longer available*)

Presentations given by North American participants:

Keynote Presentations:

Charles McClure, (Florida State University), *"Issues and Strategies for Developing National Statistics and Performance Measures for Library Networked Services and Resources."*

Invited Speakers:

John Carlo Bertot, (State University of New York at Albany), *"Measuring Electronic Library Services: Possible Statistics and Performance Measures."*

Presentations:

Vicky Coleman (University of Kansas), Colleen Cook and Fred Heath (Texas A&M University), *"SERVQUAL: A Client-Based Approach to Developing Performance Indicators."* Panel Presentation.

Dean Jue, (Florida State University), *"Collecting Detailed In-Library Usage Data in US Public Libraries: the Methodology, the Results and the Impact."*

Josephine Kibbee and Jennifer K. Ward (University of Illinois at Urbana-Champaign), *"Assessing and Addressing User Reactions to a New Public Access Catalog."*

Amos Lakos, (University of Waterloo), *"Implementing a Library Management Information System: Update and Lessons from the TriUniversity Group of Libraries Experience."*

Marjorie Murfin (Ohio State University) and Michael Havener (University of Rhode Island), *"Perceived Value, Importance and Impact of Information: How are They Related? How Do They Influence the*

Reference Transaction?"

Shelley Phipps and Carrie Russell, (University of Arizona), *"Performance Measurement as a Methodology for Assessing Team and Individual Performance."*

Carolyn Radcliff, (Kent State University), *"Benchmarking with the Wisconsin/Ohio Reference Evaluation Program."*

The keynote papers and the invited papers anchored the major themes of assessing of library values and impacts, emphasis on qualitative measurements, increased focus on institutional and service accountability, meaningful benchmarking, activity-based costing and various examples of measurement implementations.

The following papers are of particular interest to academic libraries:

Values and Impacts:

Jennifer Cram, Manager, Library Services, Education Queensland, Australia, presented the lead keynote address of the conference. The paper, "**Six Impossible Things Before Breakfast: A Multi-dimensional Approach to Measuring the Value of Libraries,**" presents a methodology for measuring value in a corporate library service, models of service business research findings and behavioral and psychological insights useful to inform performance measurement practice in relation to value. A conceptual framework for value measurement is proposed. Cram states that attempts to define value in the context of a library is extremely complex, difficult to explicate and therefore difficult to measure. Values are based primarily on beliefs and thoughts and only secondarily on evidence. She observes that an important outcome, at least internally, of the attempts to measure and express the library's value may be the process of valuation itself. Attempts to measure value will always be imprecise and incomplete, will be biased by the organization's focus and the self-interests of the stakeholders. Developing a performance measurement regime that balances the notions of efficiency and effectiveness with the resulting benefits to customers is critical to the survival of libraries and crucial for positive strategic development of library services. She makes a strong case for the notion that the way a library chooses to measure its value should be done in order to insure that the library is doing what it is designed to do well. The way the library addresses the issue of measuring its value shows a powerful public signal for what the library stands for. She concludes that when attempting to demonstrate the library's value to external bodies, it is best to express them in values that they understand—namely in the context of monetary value or relative cost recovery.

Electronic and Network Services Measures:

Developing new measures for electronic library services were the focus of a number of presentations. In an invited paper "**Measuring Electronic Library Services: Possible Statistics and Performance Measures.**" John Carlo Bertot investigates the new library services, such as Internet-based databases, web site development and maintenance, online reference, which are "different" and difficult to measure. The paper covers assumptions, models, methodologies and standards for networked and web-based data. He describes the issues framing the lack of measurement of electronic library services due to lack of agreement on:

- what to measure;
- how to measure; and
- interpretation of the data.

The paper describes the work done by Bertot and Charles McClure to measure electronic library services

in U.S. Public libraries and statewide state library run networks.³ The paper describes descriptions of measurement variables, their definitions and assorted measurement techniques to collect data on those variables. He also emphasizes the need for libraries, associations and vendors to agree upon measurement indicators, measurement methodologies, data collection techniques and new reporting standards. This is especially essential with electronic services, since key data are beyond the library control and in the hand of vendors; remote webhosting sites and assorted licensing agreements. He concludes, that there is much work to be done, especially in developing measurement standards. Without these standards, institutional comparisons will be impossible.

Charles McClure's keynote paper "**Issues and Strategies for Developing national Statistics and Performance Measures for Library Networked Services and Resources.**" provides an overview of how one might think about strategies and techniques for assessing networked library resources and services. Since there is no agreement on what is good data, McClure hopes that libraries will settle for data that are "good enough" in order to have information to build on. Although libraries need to gather facts and to learn to analyze them, success in advancing our understanding of the quality of networked services may depend on paying close attention to customer stories, i.e., qualitative measures. A number of practical guidelines and measurement strategies are offered for consideration: agree to disagree, focus on a small number of measures, investigate equivalent traditional and electronic measures for clarity, learn from e-commerce web sites about useful data to measure, especially automatic data capture, electronic helpdesk questions and answers. McClure emphasizes the need for states and national agencies to speed up data gathering methods and for faster reporting and analysis to member libraries. The fact that the electronic environment is changing at a very fast rate is an additional burden for all.

Another paper focusing on electronic library indicators is Zoe Clark's from CERLIM, who describes the EQUINOX Project⁴ in "**EQUINOX: the Development of Performance Indicators for the Electronic Library.**" EQUINOX is a project funded under the Telematics for Libraries Programme of the European Commission. The project addresses the need of all libraries to develop and use methods for measuring performance in the new networked, electronic environment, alongside traditional performance measurement, and to operate these methods within a framework of quality management. There are two main aims. The first aim is to develop international agreement on electronic library performance indicators emphasizing information access and delivery, costs and user satisfaction. The second aim is to develop and test an integrated quality management and performance measurement software tool.

Benchmarking:

Stephen Town presented an invited paper on "**Benchmarking: Strife, Theft or Communion?**" The paper describes the development and experience of the use of benchmarking in UK academic libraries. Using a selection of these exercises and case studies, Town explores the rationale, methodology, some results and benefits achieved. He observes that although benchmarking is a powerful tool for performance measurement, it requires institutional commitment and effort, it is time consuming and best practices may be difficult to identify anyway. He observes that traditional measures used may not be very helpful in the long run and he advocates for involved leadership and action on benchmarking results. Another point is for increased sharing of benchmarking information among libraries. He hopes for the establishment of an international benchmarking consortia and a clearinghouse for benchmarking information and activities, staff education and training in benchmarking methodologies and increased use of electronic communication for benchmarking and external to the library benchmarking partners.

A number of other papers concerned with benchmarking were presented as well: Liz Hart, University of Staffordshire, Lorraine Noel, University of Huddersfield, Chris Martindale, University of Derby and Katherine Everest, Leeds Metropolitan University presented another paper focusing on benchmarking: "**Benchmarking Advice Desks in Higher Education.**" This benchmarking project focuses on the

library information desk issues. Carolyn Radcliff, Kent State University, presented "**Benchmarking with the Wisconsin/Ohio Reference Evaluation Program.**" The paper describes the recurring application of WOREP at Kent State on their reference services and the results gave them internal and externally comparable data. The paper emphasizes the possibilities of using the results for benchmarking with many other institutions, which also used the same instrument. Henk Voorbij, National Library of Holland and the University of Amsterdam presented a paper on "**Benchmarking in Dutch Academic Libraries,**" a project that resulted in the creation of a manual with definitions and measurement methods. He noted the importance of raising managers' awareness of the benefits of benchmarking. Isabella Trahn presented her and Anne Willson's paper "**Best Practice in Australian University Libraries: Outcomes from a national Project.**" Trahn reported on federally funded research to get a picture of benchmarking and best practices in Australian University libraries and what developments are required for the future.

The Scorecard Models and their Use in Library Performance Measurements:

A number of papers describing the scorecard model and its uses in library measurement were presented. Dr. Judith Broady-Preston and Tim Hayward presented a paper on scorecard models: "**Scorecard Models and their Use in Measuring Performance: UK Retail Banks, A Case Study.**" Heilla Pienaar and Cecilia Penzhorn from South Africa dealt with the Balanced Scorecard approach in an academic setting in "**Innovative Implementation of the Balanced Scorecard in an Academic Information Service.**" Göran Wideback presented "**Balanced Scorecard and Intellectual Capital in a Library: A Strategic View.**" Balanced Scorecard⁵ is a management methodology in which the results of an organization's activities are described in several groups of dimensions. The model enables to bridge the gap between the strategic objectives of the senior management level with the front-line staff who has to implement the objectives. In addition to financial results such as profits, other dimensions such as customer relations, efficiency and staff competence are noted. The additional items are considered as profit drivers and as such future indicators, with their own values and therefore have to be "balanced". The papers describe the processes of using the Balanced Scorecard model in a library setting, its advantages and potential uses.

Government Involvement in Library Assessments:

Ian Winkworth presented a keynote paper titled "**Library Performance Measures: Government Perspectives.**" The paper examines various government's increased level of attention to libraries. He finds increasing high level of interest mainly in the U.K, New Zealand, Australia, and in the U.S. He focuses mainly on the U.K. where the government is especially interested in public libraries. He notes that in all countries where we can detect heightened government involvement, especially in areas of fiscal and cultural accountability, a culture of accountability is developing is mainly in public services. At this time the interest is concentrated mainly in use of ratios, simple inputs and outputs and some quality judgements. Additional trends in the interests shown by government bodies are focus on customers and self-education as a value and an overall positive attitude to library services. Winkworth notes that although increased government attention will make most managers work more difficult, it also reflects a higher public profile and importance for libraries. For the future, he predicts increased involvement of government bodies in library outcomes, and advises for libraries to plan to have data available to demonstrate value, outcomes and impacts.

Service Quality Measures:

Philip Calvert's keynote paper "**A Report on Preliminary Investigations of Attitudes to Integrated Performance Measures among New Zealand University Library Staff.**" describes inquiries that attempt to develop user-defined measures that integrate measures of library effectiveness with indicators of service quality by studying the attitudes of academic librarians to integrated measures in seven New Zealand academic libraries. The study discusses relevant measures of quality and effectiveness and the

constituency perception of measures of market penetration, stock availability, shelving turn-around, staff performance, etc. Calvert finds that service quality is what matters to the customer. Libraries should concentrate on quality as expectation and measure the gap between customer expectations and actual performance (gap analysis). Service quality gaps are difficult to detect in internally focused institutions. He also advocates focus on conformance quality, which means the reduction of errors, defects and delays. He notes that these are issues about which users make judgements on and place value on. Libraries need measurements to identify this kind of variance and to connect conformance quality with user defined measures. Calvert advises that libraries should undertake gap analysis methods and concentrate on reducing the gaps between expectations and performance. Calvert advises to concentrate on customer related measures of effectiveness, satisfaction and service quality that asks questions such as: How Well? How Accurate? How Responsive? How valuable? How courteous? How Satisfied? All results should be recorded and reported for accountability both to stakeholders and for management for decisions. A number of customer measures are discussed in detail, and Calvert concludes that measures alone may be insufficient to convince all stakeholder groups of the library's value. The libraries need leaders that can convince funding agents of the value of the library's measured outcomes and these leaders should insist on better reporting tools and management information.

A number of other papers touched on issues of quality service:

Vicki Coleman, Colleen Cook and Fred Heath comprised the panel on "**SERVQUAL: A Client-Based Approach to Developing Performance Indicators.**" They reported on six years of experience at Texas A&M Libraries with the SERVQUAL instrument. SERVQUAL measures the gap between minimum expectations of clients on a range of library services and the perceived delivery of those services. The panel describes the Texas A&M results in detail and the use of the Six Sigma analysis tool in conjunction with the SERVQUAL in analyzing the data. This is an alternative approach to monitor service and to benchmark.

Marjorie Murfin and Michael Havener "**Perceived Value, Importance and Impact of Information: How Are They Related? How Do They Influence the Reference Transaction?**" This paper analyses the nature of "patron" importance ratings and their impact of reference transactions. The findings are based upon a over 10,000 transactions in public libraries and the same number in academic libraries as measured by the WOREP tool between 1983 and 1998. The Wisconsin-Ohio Reference Evaluation Program is well established and its utility has been proven. Michael Havener of the University of Rhode Island Graduate School of Library and Information Studies directs the program, which is set up on a cost recovery basis. Findings indicate that when patron assign "importance" to their reference needs, these are influenced by factors of alternate availability and external consequences. A value measure is situation dependent. Patrons, who could identify the impact of not getting their information, assigned a much higher value to it. Findings also show a correlation between how patrons communicate to the librarian the "importance" of their needs, and the librarian's perception their "importance" need. Findings also assigned values of cost effectiveness related to perceived "importance" of questions, groups of identifiable customers and library staff status. Professional librarians time on reference desk is more cost effective, since failure rate is lower, even if they spend additional time on each transaction. The cost of failed reference transaction should be an important factor in measuring reference effectiveness.

Shelley Phipps presented on her and Carrie Russell's paper "**Performance Measurement as a Methodology for Assessing Team and Individual Performance.**" The paper describes the context of developing a methodology for assessing team and individual performance as part of the University of Arizona Library's multiyear organizational restructuring from a hierarchical, internally focused organization to a team-based, customer focused, learning organization. The paper describes the development of a new Performance Effectiveness Management System (PEMS). There were three

objectives:

- to build an evaluation system based on the principles of a team environment,
- measure team effectiveness from a customer point of view
- assess individual performance in a way that would support motivation, self-responsibility and continuous learning.

The system uses Rowena Cullen's Values/Focus/Purpose matrix presented at the Second Northumbria Conference⁶ and it advances the values of a learning externally focused library. The paper also describes the first year implementation challenges and resulting progress, which indicates positive advances both for individuals and teams at the University of Arizona Library.

Ian Winkworth reported on a University of Northumbria project carried out by him, Michael Heine, and Kathryn Ray, titled "**Measuring User's Service Seeking Behaviour.**" The objectives of the research project were to clarify a conceptual way the sequential patterns of use of a library, to explore how well service design matches use patterns and to design a survey and analysis methodology. The results are very encouraging. A data collection method was developed that works, some new analytical tools are in place and the pilot results suggest that libraries may learn from this new approach about user behaviors and patterns of user Behaviour. The analysis package needs more work to make more user friendly.

Management Information Services:

Amos Lakos presented a paper on developing an implementation process for a Management Information System and extending the MIS concept to a consortium in "**Implementing a Library Management Information System—Update and Lessons from the Tri University Group of Libraries Experience.**" The paper described in detail the process of setting up a management information environment in a library. It concludes with a discussion of the reasons for the scarcity of MIS implementations in libraries and listed the institutional requirements that are needed for achieving success.

A French experiment in developing Decision Support Systems was covered by Lamia Badra's paper, "**Evaluating for Better Management: Experimenting Decision Support Systems Funded by DGXIII of the European Community Commission on French Libraries Environment.**" The paper focuses on the results of the French project of evaluating the CAMILE decision support system for better management of French libraries. The paper concentrates on the French experience with examples of current implementations and ongoing research.

Activity-based Costing:

In her keynote address "**The Cost of Quality: Cost Analysis and Cost Management as Counterpart of Performance Management.**" Roswitha Poll reported on a groundbreaking cooperative project between three German academic libraries that attempts to develop a framework for activity-based costing for libraries, develop suitable software, and produce a handbook for use in academic libraries. Cost is defined as the consumption of resources to acquire, produce or maintain goods within a defined time period. Identifying costs and costs structures in each library service and activity will help libraries make better informed management decisions in such areas as resource allocations, outsourcing, service changes and staffing. Poll discussed the process of data collection in detail, as collecting staff time and cost information is one of the most politically sensitive issues. The model shows which resources are consumed where by which activities/processes and with what results. Results also show unit costs. Managing costs optimizes processes and brings about adjustments and productivity gains without cost increases, with resulting efficiencies.

There were many more interesting and worthy papers that are not included in this summary. These will be available soon as part of the conference proceedings.

Launch of New Journal:

During the Conference a new international journal published by **Aslib** was launched. The title is *Performance Measurement and Metrics: The International Journal for Library and Information Services*. (ISSN 1467 8047). The journal will focus on library performance measurement and assessment activities and it will be published three times a year. Subscription rates are £65/\$99, with 20% discount to Aslib Corporate Members. The journal has an international editorial board, including Joan Stein, from Carnegie Mellon University. The first sample issue dated August 1999 is available on the Web at <http://www.aslib.com/pmm/volume/number/index.html> and is being distributed to libraries and other interested institutions. It includes an opinion piece by Amos Lakos, articles by Rowena Cullen, Dr. Roswitha Poll and Joan Stein, reviews and endnotes.

Endnotes

1. See the third Northumbria International Conference website at <http://thenortheast.com/pm3web/index.htm>.
 2. Proceedings of the earlier Northumbria Conferences are available at <http://thenortheast.com/pm3web/pm3procs.html> or through the [ARL Publications Program](#).
 3. Charles McClure and John Carlo Bertot, "Developing National Public Library Statistics and Performance Measures for the Networked Environment," 8 Nov. 1999, <http://www.albany.edu/~imlsstat/>.
 4. See the EQUINOX website at <http://equinox.dcu.ie/index.html>.
 5. R.S. Kaplan and D.P. Norton, *The Balanced Scorecard: Translating Strategy into Action* (Boston: Harvard Business School Press, 1996).
 6. Rowena Cullen, "Does Performance Measurement Improve Organizational Effectiveness? A Post-Modern Analysis," in *Proceedings of the Second Northumbria International Conference on Performance Measurement in Libraries and Information Services* (Newcastle upon Tyne: Information North, 1998), 3–20.
-

[Table of Contents for Issue 207](#) | [Other Statistics and Measurement Articles](#) | [Other Leadership and Management Articles](#)

ARL policy is to grant blanket permission to reprint any article in the Bimonthly Report for educational use as long as full attribution is made. Exceptions to this policy may be noted for certain articles. This is in addition to the rights provided under sections 107 and 108 of the Copyright Act. For commercial use, a reprint request should be sent to ARL Director of Information Services, [Julia Blixrud](#).

© The Association of Research Libraries

Maintained by: [ARL Web Administrator](#) Site Design Consultant: [Chris Webster](#) **Last Modified:** June 19, 2002