

## **MEASURING SERVICES, RESOURCES, USES, AND USE IN THE NETWORKED ENVIRONMENT**

Sherrie Schmidt (Arizona State University)  
Rush Miller (University of Pittsburgh)  
Wonsik "Jeff" Shim (Florida State University)  
Joseph Zucca (University of Pennsylvania)

The ARL E-Metrics Project is one component of the ARL New Measures Initiative, an effort that tries to respond to the needs for (1) demonstrating the library's impact in areas important to an institution, and (2) maximizing the effective use of resources by benchmarking best practices in order to save or reallocate resources.

The presentation will provide an overview of the project (Schmidt and Miller), discuss specific findings in the initial study period (Shim), and share issues and challenges that lie in collecting and using data regarding networked resources and services from an individual institution's point of view (Zucca).

### **About the ARL E-Metrics Project**

The ARL E-Metrics Project supports an investigation of measurement of library performance in the networked information environment. ARL has had limited success in collecting data on expenditures for electronic resources over the last six years but more in-depth investigation is made possible through this project. The 24 ARL libraries are contributing financial and staff resources for this exciting undertaking. This project is under contract with Florida State University's Information Use Management and Policy Institute and is directed by Charles R. McClure, Wonsik "Jeff" Shim, and John Carlo Bertot under the leadership of project co-chairs, Sherrie Schmidt, Dean of University Libraries, Arizona State University Library, and Rush Miller, University Librarian and Director.

Information on this project and related activities is located at:

ARL E-Metrics Project: <http://www.arl.org/stats/newmeas/e-metrics.html>  
ARL New Measures Initiative: <http://arl.org/stats/newmeas/newmeas.html>  
ARL Expenditures for Electronic Resources: <http://www.arl.org/stats/arlstat/#sup>

The project is an important first step to help ARL libraries address issues such as resource allocation, improved service quality, and higher education outcomes in the networked environment. A primary product from the project will be the development of selected statistics and performance measures that describe information services and resources in the networked environment.

While the ever increasing number of electronic sources and the advent of the Internet as the primary vehicle for data provision and retrieval have opened many exciting opportunities for research libraries, they have also caused some frustration for library administrators. Such as occurred because networked resources and services tend to be more expensive than traditional services and also because there are not as yet enough data that answer such critical questions as who is using the services for what purpose, and what is the impact of new and improved services on the users and on the parent institution. Some example possible statistics needed in this new environment include:

- Count of electronic reference transactions.
- Virtual visits (sessions) to the library's website.
- Counts of high-use and low-use web pages.
- Count of sessions on specific databases.
- IP addresses for sessions on specific databases.
- Time per session on specific databases.
- Turn-aways per time period per specific database.
- Primary use of selected electronic services and resources.
- Hours of user training on electronic services by library staff.
- Cost per session on specific databases.

- Count of full text downloads per time period per database.
- File size of full text downloads per time period per database.
- Count of on-site versus remote sessions per database.

*These statistics are illustrative only.* Yet to be accomplished is agreeing on definitions and data collection methods to produce reliable and valid statistics, determining the degree to which such statistics can also be comparable across different libraries, and making linkages between such statistics and higher educational outcomes

The project's initial phase (May-October 2000) is to tap into current practices at ARL libraries as to statistics, measures, processes, and activities that pertain to networked resources and services.

During the second phase of the project (November 2000-June 2001), based on the knowledge inventory in PHASE I and drawing from previous initiatives such as ICOLC (International Coalition of Library Consortia), an initial set of data that needs to be collected will be identified and field-tested at selected libraries. This process will assess the degree to which such data collection is possible and the collected data are comparable among member libraries.

During the final phase (July 2001-December 2001), a set of refined measures will be proposed to ARL, complete with data descriptions and data collection/analysis/use guidelines. When the project is completed, we will be in a much better position to describe both traditional and emerging, electronic resources and services. The products from the project--a set of tools, processes, and techniques--will assist ARL libraries better meet the needs of their users, and make better decisions regarding the purchase, use and deployment of electronic services and resources. In the process, we will learn a great deal about impacts that networked services have on existing services, technology infrastructure, and organizational structure.